ONTARIO
PROVINCE OF OPPORTUNITY

CHARACTERISTICS OF COMMERCIAL RESORTS AND RECREATIONAL TRAVEL PATTERNS IN SOUTHERN ONTARIO

DEPARTMENT OF HIGHWAYS ONTARIO CANADA

**ONTARIO JOINT HIGHWAY
RESEARCH PROGRAMME**

Under the Ontario Joint Highway Research Programme the Universities of Ontario undertake highway research projects sponsored by the Department of Highways, Ontario.

The Hon. George E. Gomme is the Minister of Highways. Mr. A. T. C. McNab is the Deputy Minister of Highways.

Dr. E. G. Pleva is Head of the Department of Geography of the University of Western Ontario.

This study was carried out at the University of Western Ontario under the direction of Professor R. McDaniel, associate professor, Department of Geography.

The report is substantially the work of Mr. G. David Boggs who carried out the field work and analysis; data from this study was incorporated into a thesis submitted by Mr. Boggs to the Graduate Faculty of the University.

Copies of this report and a list of other reports on highway research projects may be obtained by writing to:

The Director,
Research Branch,
Department of Highways,
Downsview, Ontario,
Canada.

ONTARIO JOINT HIGHWAY RESEARCH PROGRAMME

CHARACTERISTICS OF COMMERCIAL RESORTS AND RECREATIONAL TRAVEL PATTERNS IN SOUTHERN ONTARIO

by

G.D. Boggs and R. McDaniel

D. H. O. REPORT NO. RR133

May, 1968

SUMMARY

This study of travel patterns and user characteristics at commercial recreation resorts and private cottages, was undertaken to examine procedures for predicting recreational travel between places of origin and destination at commercial and private vacation areas in Southern Ontario.

In selected areas, resort owners, resort guests, and cottage owners were interviewed by a field team using questionnaire forms. The information obtained was subjected to electronic data processing and statistical analysis which included percentage frequency of occurrence, factor analysis, factor score analysis, and mapping of factor scores. The data variables obtained from the questionnaire were subjected to chi-squared analysis, but correlations in the variables were less significant than had been expected.

A method of classifying resorts was devised which should lend itself to the explanation of traffic flow and provide the basis for an attraction index.

CONTENTS

CHARACTERISTICS OF COMMERCIAL RESORTS AND RECREATIONAL TRAVEL PATTERNS IN SOUTHERN ONTARIO

INTRODUCTION

The post-war phenomenon of mass recreation has given rise to unprecedented pressures upon natural and man-made recreation resources and facilities. The exodus of holiday seeking urbanites since 1950 has become one of the most conspicuous current social changes. To the family for which a summer holiday away from home is a newly acquired diversion, this outlet has come as a luxurious release from the monotony that may formerly have usurped the entire year. To the family long accustomed to this form of recreation, the pleasant trip to vacation spots and the relative solitude at the destination has in many cases become a thing of the past. To the resort operator, the retailer or the cottage builder, this growth in the vacation industry is viewed as a particularly lucrative opportunity. To the resource planner, the highway planner and in fact all those dedicated to the orderly growth of the industry and the maintenance of natural attributes which attract and satisfy the recreating public, the problem of meeting demands has assumed alarming proportions.

The Department of Highways' primary interest in tourism derives from the fact that 90 percent of Ontario's tourists travel by automobile, and hence contribute substantially to summer traffic in particular. Over 75 percent of all traffic on certain Ontario Highways is recreational. In order to plan for future highway development in the predominantly recreational areas, it becomes necessary to have a basic understanding of the underlying characteristics that generate this type of travel, as well as an insight into the problems it creates.

Any study which attempts to measure non-quantifiable intangibles such as human preferences, immediately faces complex problems. If there were clear-cut answers to human choice variables, all sociologically-oriented research would be infinitely easier. As yet, however, no researcher has been able to satisfactorily measure levels of preference that individuals attach to various attributes or experiences. There is no quantifiable trade-off function to expose the marginal satisfaction between varied aesthetic experiences or even between the costs of resort 'A', exhibiting certain attributes and the different cost of resort 'B' exhibiting a different set of attributes. Why one family will travel an extra 300 miles to visit a recreational destination that might nearly be duplicated a day's travel closer

to home, while another would not consider this, still lies beyond our capacity to say with any degree of assurance. We know, however, that very definite preferences do exist, and we may attempt to explain certain of these variables in terms of their frequency of occurrence and their correlations with other variables. It is on this basis that all analysis was undertaken in this study, and while it is most difficult to make any conclusive statements, there are certain patterns that emerge. These should help to provide the foundation for future research and will indicate a few of the myriad problems that need to be investigated more fully.

RESEARCH MODEL

This study was conceived as a pilot project by the Department of Highways, Ontario. As such, there was a question at the outset regarding the form the survey should take. There were two possibilities:

1.   that several small areas should be intensively sampled
2.   that a large area should be sampled extensively.

After a lengthy consideration of the two choices, the latter was chosen for the following reasons:

a.   Several limited-area, studies-in-depth were already planned by the Department of Highways, the Department of Tourism and Information, and a consulting firm.
b.   The Department of Lands and Forests was inaugurating a province-wide survey of campers in the Provincial Parks, and it was felt that the two surveys might serve to complement one another.
c.   There was a need for general information over a wide area in order to gain some insight into comparative regional problems and characteristics.
d.   There was the desire to investigate the comparative usefulness of various types of data on a regional basis.

Once the decision was made to sample extensively, the problem arose as to exactly what sectors of the tourist industry were to be investigated. It was decided that both the commercial resorts and private cottages should be sampled. In retrospect this was a singularly unwise decision. The constraints upon the survey were strong. The field season was to run from July 1st to August 31st (approximately 50 working days). The field staff consisted of the author and one assistant, and due to the nature of the survey there was an extensive amount of time-consuming travel.

In order to circumscribe the study area to some degree it was decided to sample only in resort areas 10, 11, 12, 13, 14, 15, 17, 18, 20, 22, 23, 25, 32, 33, 34 and 35 (refer to Figure 1). As such, the study area omitted entirely those areas east of the Frontenac Axis, south-west of a line running roughly from Oshawa to Goderich, and north of the French River, Lake Nipissing and the boundaries of Algonquin Provincial Park. In addition, area 21 (Trent Canal System, South) was omitted due to its relative lack of resort development.

Using the Department of Tourism and Information publication 'Where to Stay in Ontario', it was determined that there were about 3,600 resorts in the study area. Using the

same document as a reference, and resolving Tourism Vacation Regions to Resort Areas (upon which the sample was based) a slightly larger than 3 percent random sample was selected, stratified on a percentage basis for each of the 16 resort areas. In total, 120 resorts were selected.
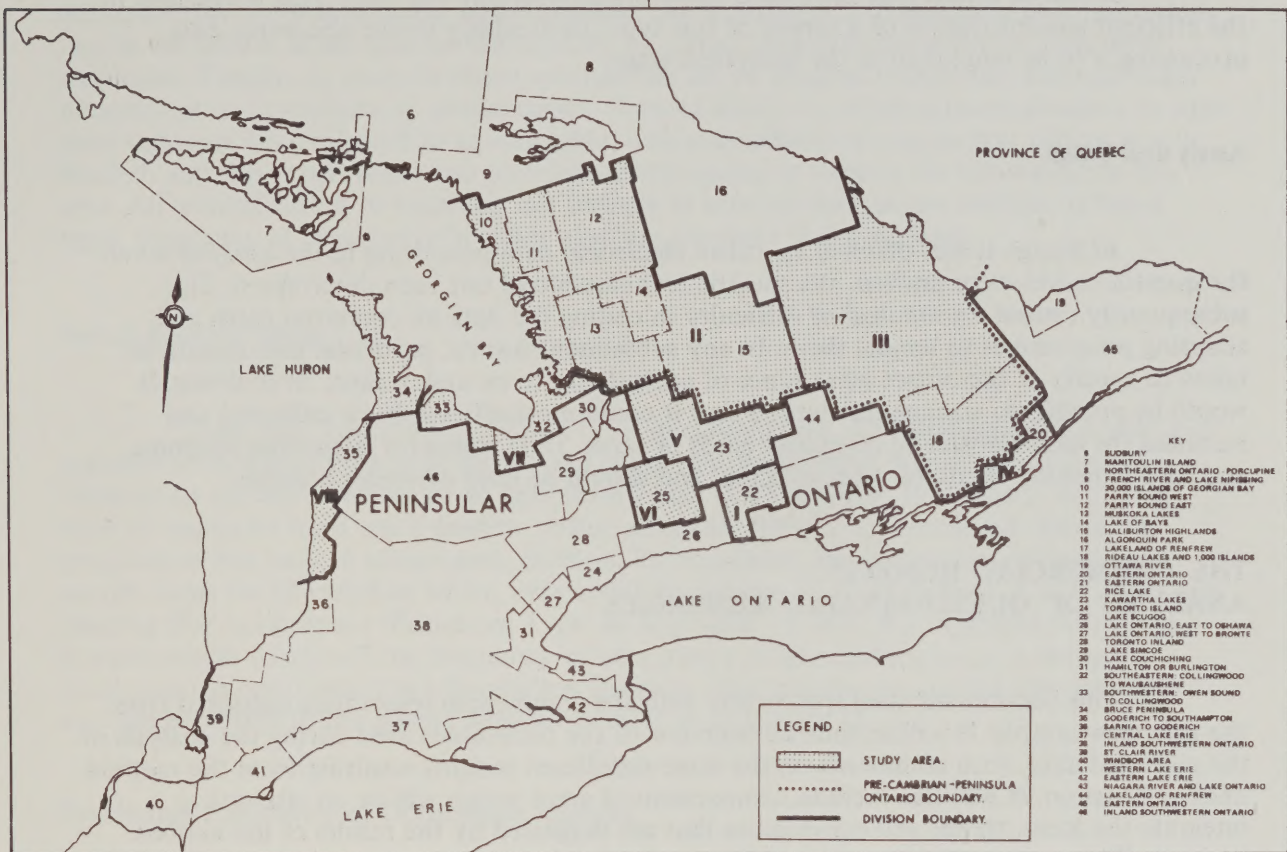
FIGURE 1, RECREATION DIVISIONS AND RESORT AREAS*

It will be noted that the resort areas have been adapted from Wolfe's original boundaries (1). The adjustments were made so that all area boundaries would coincide with existing county or township lines. This was done so that census data on a township basis could be more readily applied to the resort areas.

Field Stage

A number of observations on the field collection stage is in order.

A short field trip of one week was utilized at the beginning of the field season during which questionnaires were tested. Upon completion of this trial period necessary revisions in the forms were made before continuing the survey. This is an essential element

* Resort Areas adapted to Township Boundaries (After R.I. Wolfe)

in any survey no matter how carefully it has been pre-planned, and should be allowed for in any research model involving interviews.

It will be noted that the closed questionnaire format was used. This is essential in the efficient administration of a survey of this type, particularly where electronic data processing is to be employed in the analytical stage.

Analytical Stage

Although it was planned to utilize electronic data processing in the analysis when the questionnaires were drafted, the specific techniques had not been determined. This subsequently caused a good deal of difficulty in coding the data on computer cards and adapting programmes to handle them. In any subsequent survey, particular care should be taken to specify at the outset what types of analysis are to be undertaken. In so doing, it would be possible to arrange the data so that it could most efficiently be collected and recorded for later transfer to computer cards or tapes. Data forms for automatic scanning and card punching would be more efficient and should be used wherever possible.

**THE COMMERCIAL RESORTS:
ANALYSIS OF QUESTIONNAIRE RESPONSES**

This Section will deal specifically with the commercial resort data collected from the interview sample. It will include an overview of the techniques used during the analysis of the collected data, with comments on the most significant insights resulting from the method under discussion. It will also include comparisons of areas which will be an attempt to integrate the ideas, trends and conclusions that are suggested by the results of the various analyses. Where appropriate, some problems and possible solutions or recommendations dealing with them will be added. This has been done to provide immediate recognition of specific items.

It may be well to refer here to several points already made. First, this is a pilot study and was purposely designed to cover the large area to help identify inter-regional similarities or differences. The small sample size was recognized at the outset and accepted as a fundamental constraint. Second, the study was set up to serve a dual purpose:

a. to collect as much information as possible about the characteristics of the resort industry during the survey stage
b. to attempt an evaluation of various types of analysis, given data of a largely non-quantifiable nature.

Because of these facts, the reader will recognize the difficulties involved in setting forth statistically validated conclusions. Most of the analyses utilized were in the nature of hypothesis formulators rather than hypothesis testing devices. In fact a conscious effort was made to avoid formulating subjective premises prior to the analytical stage. This was done for the following reasons. The field of recreational research is relatively new. Any assump-

tions that could be made in advance would have been based upon either common knowledge (which might be of little significance) or upon highly subjective opinions of the author, or other recent researchers in the field (which might tend to obscure more objective findings resulting from a biased input). Because the data covered a wide range of variables, it was felt that deeper insight could be gained by explaining as great a number of correlations as possible. Although this aim was pursued, where feasible, the techniques imposed their own limitations due to the nature of the data or the capacity of certain computer programmes that were employed. Finally, an analysis which involves the use of nominal rather than interval scales presents myriad problems of measurement. Current ability to attach numerical values to what have variously been referred to as intangible, non-quantifiable or non-market values, is still limited, and this report makes no pretense of attempting to expand the knowledge in this area. All quantification of variables, not initially in interval units in the analysis, is based upon frequency of occurrence in either absolute numbers or percentages.

Initial Analysis Stage

Data were collected on 'closed type' questionnaires. All responses were coded and transferred to computer punch cards. Two computer programmes were then utilized to produce an off-line print-out of all data from which it was possible to obtain a rapid over-view of responses from any interview station (a resort). Next a single-column tabulation programme was used to obtain area, division, Pre-Cambrian, Peninsular Ontario and total sample sums for all variables which were coded by a range of numbers from 1 to 9 under one heading (for example see 'Foreshore Type' in Appendix 1). With this organization of data, it was possible to extract the frequency of occurrence of all variables as a percentage of total possible occurrences in a Recreation Division. This process was carried out manually and not extended to the Resort Area level (refer to Appendix 2).

Percentage Frequency of Occurrence Analysis

For purposes of this analysis variables were grouped, much as they were in the questionnaire, under six major headings:

1. Site Classification
2. Situation
3. Characteristics of Resort-Users
4. Resort Facilities
5. Trip Characteristics
6. Resort Characteristics

Again only those results which are of general significance will be mentioned in this Section. All regional comparisons will be dealt with in a subsequent Section.

Site Classification. Ontario resorts, as would be expected, are predominantly water-oriented. Only 7.2 percent of the sampled establishments did not own private water frontage and without exception these had access to nearby public water frontage. Had motels been sampled, the water-orientation factor would have been greatly altered; however, it is worth-while noting that there is a trend toward motel-type accommodation at existing resorts as well as a greater interest in the water-oriented motel. Nearly half of all resorts (47.4 percent)

were located on a large lake, (the greatest dimension being 2 miles or more). Remaining sites are divided rather evenly among three water body types: Great Lakes shoreline, 17.3 percent; small lakes, 14.6 percent and rivers, 14.0 percent. Six percent of the river sites were on an enlarged portion of the river, giving the illusion of a small lake or pond. About 60 percent of the lakes upon which resorts were sampled, were classified as 'round', (i.e., ratio of length to width did not exceed 2:1). Roughly the same proportion of sites were in view of islands, the occurrence of which is an appealing factor, but certainly not decisive in site selection.

Nearly 70 percent of sites were on lakes from which there was access, at least by canoe, to another lake or chain of lakes. In many cases canoe access is no longer a particularly sought-after asset. Many of the inter-lake runs, however, are of sufficient size to allow passage by the currently more popular small outboard-motor boat. Exposed and sheltered shore sites appear with about equal frequency; however, bayhead or cove sites occurred 50 percent of the time, while straight shore and headland sites were found in 37.9 percent and 12.1 percent of cases respectively.

Because of the water-orientation, the characteristics of the foreshore are perhaps the most commonly examined attribute to a resort. It was found that 50.7 percent of all resorts owned, or had access to, some form of sand beach. A rocky shoreline ranked second with 31.0 percent occurrence. Below that, were gravel beach (7.9 percent), cobble beach (5.9 percent) and despite its undesirable qualities, marshy shore (4.3 percent). Preferences for less desirable shoreline types are due to offsetting assets, of which aesthetic quality must not be underestimated.

Foreshore slope was shelving on 78.4 percent of sites, indicating a strong preference for this amenity and safety factor; however, the remaining 21.6 percent of sites did exhibit the less desirable precipitous slope into the water. This corresponds exactly with the high bank or cliff bank shore.

The actual building site was slightly weighted in favour of rolling terrain (50.8 percent) with 45.7 percent being almost level. Only 3.4 percent of resorts were sited on what could be called hilly terrain.

Regolith and vegetation were not calculated on a percentage basis, but although they may have only small impact upon the relative desirability of a site, there is a major distinction between shield and non-shield locations. There is little doubt that sites where mature trees have been preserved or upon which bed-rock outcroppings lend variety to the site-scape, are aesthetically more appealing to the average user than a site devoid of trees or regolithic variation. Aesthetically less captivating sites tended to be those catering to lower middle-class clientele, although one of the better known large resorts is located on a site that, in these terms, is particularly unattractive. Its appeal is definitely not site-oriented, but depends on other attributes.

Situation. In the over-all sample, 35 percent of resorts were located immediately adjacent to a first-class highway. Of the remaining 65 percent, 11 percent were adjacent to a second-class highway, 10 percent were on a paved county, district or township road, and 44 percent

of resorts required access over gravel roads. For those stations not on a first-class highway, the average trip to the nearest highway of this standard is 7.7 miles, though the range was from .5 to 40 miles. For the 44 percent of resorts on gravel roads, the average distance to pavement is 3.8 miles, though again the range was from .25 to 16 miles. Twenty-one point six percent of all resorts maintained private entrance roads of .25 of a mile or more, with the average being .74 of a mile and the longest observed being about 2 miles. Although it was not a concensus, numbers of guests interviewed suggested that a gravel road, if in good condition, tended to enhance the trip to a resort in that it gave the illusion of being 'farther off the beaten track'. A well maintained private entrance road exceeding .25 of a mile poses a considerable expense to the resort operator, but generally is worth the cost in privacy from the adjacent public road, as well as providing an important element of anticipation for the arriving guest. A rather strong case could be developed for the wider usage of circuitous entrance roads, to give the most advantageous exposure of the site, upon approaching. This principle is widely employed by landscape architects in the design of entrances to parks or for maximum aesthetic impact on a scenic parkway. Recognition of the concept could enhance greatly the initial impression created by many resorts.

An attempt was made to determine the central place to which both resort operators and resort guests looked for urban amenities and retail or wholesale services. Most frequently the operator's response indicated that his focus was upon the centre from which supplies came (particularly food, where a dining room or restaurant was on the premises). If there was a question of choice, guests were apt to think of a lower order place as the nearest centre, though in the more exclusive resorts where clientele were apt to be in the market for luxury goods such as woolens, china and more expensive handicrafts, the higher order central place once again was the focus of attention. While this discrepancy does exist, more often, operator and guest will look upon the same town or village as the nearest centre of importance with respect to which the resort is situated. The average distance to the nearest central place was calculated to be 8.4 miles; slightly in excess of the average distance to the nearest first-class highway.

The quality of access routes, and the volume of traffic passing a resort, are factors of primary concern to operators. Where access quality is low, business, particularly repeat business, will be jeopardized. Traffic volume may in some cases be an asset where 'off-the-road' business is important, however, most guests arrive with prior reservations, and high traffic density may tend to detract from the aesthetics of a resort. This is especially so where the location is on a secondary gravel road and dust or noise is bothersome. Thirty-two point eight percent of operators felt that roads in their vicinity were adequate. Eight point six percent of resort owners stated that roads would be adequate after local construction was complete, and elected not to answer this portion of the questionnaire. However, the larger group (58.6 percent) were dissatisfied with some aspect of the local road system. Table 1 summarizes complaints in order of importance.

The number of resorts on a given road, notwithstanding the comment above, is in direct proportion to the volume of traffic on the access road (Table 2).

TABLE 1, ROAD COMPLAINTS

PRIMARY COMPLAINT	PERCENT	SECONDARY COMPLAINT	PERCENT
Surface	9.5	Surface	24.1
Curves	5.2	Width	10.4
Congestion	5.2	Dust	8.0
Width	3.4	Curves	6.1
Dust	3.4	Signs	4.2
Signs	3.4	Congestion	2.6
Hills	2.6	Hills	0.0

TABLE 2, TRAFFIC VOLUME

TOTAL TRAFFIC VOLUME	PERCENT OF RESORT SAMPLE
10,000 -	34.5
5,000 - 9,999	23.3
1,000 - 4,999	14.7
500 - 999	13.8
100 - 499	13.8

The main observation here is that resorts are predominantly located on high-volume roads in the range sampled. These are, however, relatively low traffic volume roads in terms of the full range of multiple-use roads in the Province.

The last group of variables to be considered under the heading of Situation are those measuring area competition. Eighty-seven point one percent of resorts sampled stated that they had competitive resorts within the immediate area; however, this was not generally viewed as a liability. A concentration of resorts tends to be of mutual benefit in a manner somewhat analogous to the agglomeration of an industry, such as garment manufacturing, or similar types of retail stores.

Twenty-eight point five percent and 25.8 percent of resorts stated that hotels and motels, respectively, were in local competition with them. In general, however, these types of accommodation, being urban and highway-oriented, did not pose a serious threat to resort enterprises. This was not the case with respect to Provincial Parks, where more than half of the 21.6 percent of resorts situated in close proximity to a park felt that their businesses were adversely affected in two ways. One, clientele were being attracted to camping, particularly from the less expensive resorts. The second complaint emanated mostly from more exclusive resorts where it was felt that the campers were an undesirable element to be frequenting the same area, and were detracting from the over-all satisfaction guests derived

from their stay. On the other hand, a number of resorts recognizing the undeniable attraction of camping, have established campgrounds on their own premises in an attempt to join rather than fight the trend. This may be one of the more significant developments in the resort industry in recent years, and one that will be watched with interest.

Public recreation facilities such as beaches, docks and boat livery were found to be close to resorts in 47.5 percent, 44.0 percent and 42.3 percent of cases, respectively. They are usually looked upon as complementary assets in that they not only take pressure off private facilities, but also act as attractions to the general area and may acquaint users with the opportunities for longer-term stays in the local resorts.

Organized children's and youth camps were located close to 25.8 percent of resorts. The operators look upon these as a definite asset, since they bring numbers of parents and friends in search of accommodation to the vicinity during the duration of the camping season.

Agricultural land was found to be close to 45.7 percent of resorts. While from this figure it is apparently not a situational liability, one gets the impression from guests that they would prefer not to have this evidence of development too close.

Characteristics of Resort Users. In an effort to assemble information that could be used to project future resort use, a number of demographic characteristics were sampled at resorts. The two key factors were age (stage of life) and socio-economic class. These help to indicate those resort attributes which attract certain segments of society, and census projections could then be utilized to provide an estimate of what future demands may be. Any projection of this sort must, however, be predicated upon the assumption that group tastes will remain constant, and this is highly suspect at a time when the cycle of fads tends to be shortening. In terms of traffic projections minor fads are nevertheless unimportant as long as the basic urge to leave the urban areas and spend one's vacation in the rural setting remains. The long run solution to recreation problems may well be centred upon keeping people close to home for their holidays, by providing attractive recreational facilities in the urban centres. The ultimate success of this concept in turn depends largely upon the answer to a basic sociological question: Is the urge to get 'back to nature' a vestige of our common rural heritage on this continent, which will gradually diminish and disappear as future generations are born and reared in urban surroundings, or is the 're-creation' by open-space a psychological necessity in the maintenance of a healthy society? The majority of native North Americans are at most two generations removed from their rural forebears and as such may be unable to judge objectively the implications of total urban existence. A vastly altered urban form must arise if this is ever to become an acceptable way of life, and the possibility of its development will not affect a planning horizon as limited as 10 years. It is, however, a concept that must be recognized by psychologists, sociologists, urban and regional planners alike, if an eventual transition is to be effected. So far, there are only a handful of model towns in North America that have attempted to embrace the concept of a total environment.

Turning again to the resort sample, one observed that the largest single stage of life group frequenting resorts were married couples with children up to the age of 12. Eighty point two percent of resorts stated that this element ranked in one of the top two

client groups. Families with teenage children ranked second with 69.8 percent positive response. Older couples on vacation without family ranked third (42.3 percent) and were followed by younger couples without family (31.0 percent). Elderly clientele were in the top two client groups at 10.4 percent of resorts, while young unmarrieds were a significant group at 9.5 percent of resorts. In both of the latter cases, these groups tended to make up the largest single user element suggesting the greater isolation of these age groups at either end of the spectrum.

Although about 25 percent of all resorts stated that they had some guests who came specifically for the fishing, only 3.4 percent showed fishermen among the top two groups. All of the resorts in this category were in the northern quarter of the sample area.

The popular idea that groups of families tend to vacation together was downgraded. Only 7.2 percent of resort owners said this was significant. This question referred to families travelling together to the resort; however, at resorts where the repeat business is high, one finds numbers of families from diverse origins, renewing, on an unplanned basis, acquaintances made in previous years and generating a resort atmosphere not unlike that of the family-group resort. Part of the attraction of many resorts is the anticipation of again meeting people met on former visits, even though it is not planned in advance.

Information in response to the questions on 'stage-of-life trends' indicated that there was an observable change in clientele toward the three top groups listed above and in the same rank-order: 21.6 percent to married with young family, 13.8 percent to families with teenagers, and 7.2 percent to older couples without family (if any) accompanying them.

Table 3 summarizes repeat business characteristics. Percentages of resorts refer to those at which repeat business category ranked in one of the two top positions.

TABLE 3, PERCENT REPEAT BUSINESS

PERCENT RANGE	NUMBER OF RESORTS	PERCENTAGE OF SAMPLE
0 - 9	2	1.7
10 - 19	1	.86
20 - 29	8	7.2
30 - 39	14	12.1
40 - 49	10	8.6
50 - 59	14	12.1
60 - 69	22	19.0
70 - 79	17	14.7
80 - 89	12	10.4
90 - 100	16	13.8

In sampling the socio-economic class of guests, percentages once again refer to resorts where a particular class ranked either first or second in clientele volume. The largest were 'white collar' clients with 64.7 percent of resorts catering to a large proportion of this socio-economic class. Predominantly 'blue collar' class resorts came second at 49.2 percent of the total. Professional class ranked third with 37.9 percent responding positively. There were relatively few resorts where labouring-class clientele were significant (8.6 percent), although an additional 6 percent showed a combined blue-collar and labouring-class clientele as significant. As would be expected, guest class combinations divided nearly always between white and blue-collar; however, upon examining stations where there is a changing trend in clientele, it is invariably downward along the socio-economic scale, with the largest group trending to blue-collar class (17.3 percent). This, it is felt, indicates a highly significant evolutionary state in the resort industry and corroborates statements that an ever enlarging segment of society can now afford a holiday involving considerable expense. Trends toward a white-collar and professional class clientele were identical at 3.4 percent. This statistic may suggest only greater intermixing between these groups.

Conspicuous by its near absence was reference to clientele from farms. In the entire sample only one resort had any farm class clientele; however, this same establishment indicated they felt there was a trend in this direction! Undoubtedly, as time goes on and farming becomes more a business and less a 'way-of-life', more farm families will seek standard forms of recreation. With the decreasing size of farm populations, however, and the fact that the Ontario tourist season coincides with the peak of activity on the farms, it is unlikely that this province will ever feel an impact from this source. It is more probable that winter holidays outside Canada and to a lesser extent winter recreation in Ontario will attract this group.

Vacation length (that is the length of stay at a given resort) emerges as a function of mobility and disposable income (which are themselves correlated). There is no doubt that as total vacation length increases so does mobility, but length-of-stay trends are at the same time downward. There are very few jobs left today outside of agriculture that do not provide a two-week annual vacation with pay, and the trend is toward three weeks and in some cases a month. For years back, the most common length of stay at Ontario resorts has been two weeks. Families would come and spend their entire holiday at one spot. This traditional pattern has changed. The two-week stay ranks second with 53.4 percent indicating it is significant, while a trend to a two-week stay showed up in only four cases. The one-week stay, however, was significant at 74.1 percent of resorts, with 16.3 percent showing a trend to this category. Although the guest responses are not beyond question, there were a considerable number of interviewees who said that their vacation had been spent at two locations and in a few cases three. More often the trip was made an integral part of the holiday to or from a resort with the single week only being spent at one location. A host of variables offer themselves in explanation, but in addition to the mobility and income factors mentioned above, driving for pleasure, the educational contacts of a more varied holiday, and the more dynamic tempo of society at large, all contribute to the desire for less static vacations. The continuation of this trend alone (not to mention heavier weekend and extended trip activity) could nearly double traffic volumes, with the population base remaining constant. These have profound implications for the traffic engineer, though it is not possible to state with authority at this time that such will be the case.

Stays in excess of two weeks and less than one week represent a small proportion of resort-bound traffic and there is little indication that this is likely to change in the foreseeable future. Cottaging tends to dominate the longer trips, while camping and extended trips account for most of the shorter stays. The main exceptions to the above are increasing weekend or day trips to the urbanized Great Lakes Resort Beaches and to Conservation Authority Parks from adjacent urban zones.

Over-all, one-third of the resorts felt that they were experiencing a change in vacation-length habits. Of these 25.8 percent said the trend was to shorter stays while 7.2 percent indicated a lengthening trend. In general, the latter group seem to represent a group of resorts that have been used to catering mainly to a large weekend clientele.

The variables dealt with thus far under 'users', have been ones over which the individual exercises very little choice short of how the vacation period is spent. Once the 'how' is determined, the 'where' is chosen, but the 'where' may depend on many things, the determination of which is paramount in this study. Assuming that the location has been selected, it is of interest under this heading which activities are most sought after by guests while at the resort. There is little doubt about the most important one. Water-oriented activity ranks an easy first. No attempt was made to differentiate between swimming, boating, water-skiing, etc., but 85.4 percent of responses placed water sports among the top three attractions. Seventy percent felt that sheer relaxation was the second most attractive attribute. From these a large drop was observed to the third most important factor which was the opportunity for a family experience together; 34.5 percent of responses listed this. Below that, in order, came socializing (29.3 percent), individual (non-water) sports (28.5 percent), sightseeing (19.0 percent) and group activities (10.4 percent). At the bottom were two activities, each with 5.2 percent positive response: hiking and nature study. It is readily apparent that resorts have not promoted these pastimes and that a fertile field awaits the skilled interpreter of natural history. The enthusiasm with which interpretive programmes are received in parks (especially the U.S. National Parks) is an indication of the potential attraction they hold. Not all resorts should attempt such a scheme, but some could and these would be well advised to consider adding a competent naturalist to their summer staff. In some cases, a group of resorts might employ such an individual collectively, and then collaborate on a nature programme. The greatest handicap facing such a plan is the lack of open space adjacent to most resorts. In future, it is hoped that municipal zoning regulations would require the setting aside of public open space adjacent to all resort and cottage developments for collective use by summer residents. It would help to maintain a portion of the natural environment. It would tend also to broaden the user's sphere of activity, and in so doing, not only enrich their recreational experience but also, by diversification, relieve some of the pressure on water-front resources.

Resort Facilities. All resorts were classified as to the facilities made available to the guests. The check list consisted of 23 possibilities (refer to Appendix 1).

The following table summarizes (in order of rank) the percentage of resorts having a particular facility (over the whole study area).

TABLE 4, PERCENTAGE OF RESORTS HAVING GIVEN FACILITY

RESORT CLASS	FACILITY	PERCENTAGE
V	Dock	84.5
	Boats available	82.4
	Boat launch	76.6
IV	Sports field or playground	61.8
	Badminton, volleyball	58.6
	Dining room	49.7
	Restaurant or Snack Bar	43.1
	Gift Shop or Store	37.0
III	Shuffle Board	35.3
	Water-skiing	29.3
	Swimming Float	28.4
	Recreation Room	28.4
	Tennis Courts	20.7
	Recreation Director	20.7
	Camping	17.3
II	Diving or Slide	16.4
	Marina Services	15.5
	Swimming Pool	10.4
	Boat Tours	9.5
	Golf or Driving Range	9.5
I	Bar/Lic. Dining Room or Convention	8.6
	Roped-off Childrens' Swimming Area	8.0
	Horseback riding and/or Archery	7.2

Using facilities as an indicator of type, a classification of resorts may be hypothesized using the above table as a guide. Establishments having only those facilities found at 75 percent or more of resorts would be Class V. Similarly establishments with only those facilities

found at 50 percent or more are Class IV
found at 25 percent or more are Class III
found at 10 percent or more are Class II.

Establishments with facilities found at 9.9 percent or less are Class I.

Using this system, it is possible to select representative facilities from each variable class, and on the basis of 16 key variables, rapidly classify the resort. The suggested method of determination and key would be as follows: The researcher in the field would use the key below, and starting at the highest class go down the list until one of the facilities designated as a class indicator was found. Providing indicators of all classes below the highest one found were present the resort would fall into that class; if not, the next lower class would be assigned.

Key Indicators of class are:

Class I	Horses, Golf, Boat Tours
Class II	Swimming Pool, Tennis Courts
	Recreation Director, Camping
Class III	Water-skiing, Gift Shop,
	Dining Room/Restaurant
Class IV	Sports Field or Playground
Class V	Boats available, Dock.

This classification might be incorporated with an index of accommodation size to yield an attraction index.

Trip Characteristics. The most fundamental trip characteristic is its length. For the total area, 53.4 percent of all resorts said that guest trips (one way) were predominantly between 150 and 300 miles. On either side of the mode, trips fell off rather evenly; 19 percent of resorts reported trips between 101 and 150 miles, while 18.2 percent reported between 301 and 500 miles as the most significant. Only 3.4 percent had most guests from greater than a 500-mile radius. There was a break in the curve from 100 to 50 miles (1.72 percent) then a rise to 3.4 percent for the 26 to 50 mile trip. Only one establishment had guests from a radius of less than 25 miles. Trip time was not sampled in the resort interviews. While mileage is significant, tourists on a limited time budget are more concerned with the length of time to get from origin to destination, particularly in the 'day drive' which includes the modal trip length above. There seem to be definite trip length thresholds. Trips in excess of 500 miles constitute a major excursion and require considerably more planning and monetary outlay, while there seems to be a psychological barrier against spending one's vacation closer than 100 miles from home. The fact that relatively few resorts are within 100 miles of a major resort centre may influence this. The sheer distance between one's home and recreation destination provides an intangible feeling of release from the day to day burdens associated with home and one's work.

Although trends in trip length were not sampled on an interval scale, the resort operators were asked their opinions on gross trends. Fifty percent reported no apparent change in the distances their guests travelled to the resort, while 20.7 percent observed an increase in trip length and 29.3 percent a decrease. This is somewhat unexpected when viewed against increasing mobility, but may be supported for a number of reasons. Those resorts reporting longer trip lengths tended to be the more progressive establishments whose advertising campaign was reaching farther afield. Shorter trip lengths are largely explained by the increasing clientele arriving from smaller urban centres generally to the north of Metro Toronto. During the past ten years, there has been a notable increase in the resort market potential of the small cities and towns of Southern Ontario.

The 'peak period' presents a number of interesting patterns and problems. This will be discussed in the area by area analysis below; however, one comment should be made here. The most common peaking occurs between the middle of July and the middle of August. This is largely due to the fact that industry tends to schedule its vacations during these weeks. Resort facilities are for the most part strained to capacity and very often would-be guests cannot be accommodated. On either end of the peak, facilities are under-utilized. The suggestion has been made that the tourist industry propose to industry-at-large

a more time-flexible vacation period, which would assist both the employees seeking accommodation and the resort operators in extending their 'busy season'. Such a proposal would necessitate a full public relations programme - but does merit consideration.

Resort Characteristics. Canadians are accustomed to debates concerning the foreign control of our industry. On the basis of this study, the resort industry is not one for which we need have concern. Only 5.1 percent of the sampled resorts were owned by non-Ontarians. Non-resident owners came mainly from Ohio. 34.5 percent of resort businesses were owned by people who considered they were 'local residents', while the remaining 60.4 percent of entrepreneurs came from more distant parts of the Province. There is an indication that in some parts of Ontario, particularly in the east, the concentration of American holdings has been diminishing. The largest group of U.S. owned resorts seem to be fishing lodges in the northwestern portion of the study area. This region offers the best fishing that remains in Southern Ontario.

One of the major distinctions among resorts is that of accommodation type. Six classes appeared on the questionnaire:

1. American Plan (A.P.)   Accommodation and meals included in one rate. Dining Room.

2. European Plan (E.P.)   Accommodation and meals on individual rates. Dining Room or Restaurant.

Either one of the above may provide rooms, motel units and cabins (without housekeeping facilities).

3. Housekeeping   Rate provides a self-contained unit with kitchen facilities. Normally this is cottage accommodation, although some motel type units include housekeeping facilities.

4. Lodging   Accommodation only, with no provision for meals.

5. Resorts providing both American Plan and European Plan.

6. Resorts providing both Housekeeping and Lodging only units.

Accommodation types in rank order were as shown in Table 5.

TABLE 5. PERCENTAGE OF RESORTS WITHIN ACCOMMODATION TYPES

CLASS	TYPE OF ACCOMMODATION	PERCENTAGE
1	Housekeeping	35.3
2	American Plan	26.8
3	Housekeeping and Lodging	19.0
4	American Plan and Housekeeping	13.8
5	European Plan	3.4
6	American Plan and European Plan	1.7

Until after World War II, the American Plan Resort was the most common in Ontario, but since that time, with the increase in the vacationing public, Housekeeping (Cottage) resorts have assumed first place. They provide a more economical form of accommodation, as well as a less stringent daily routine since dining room hours need not be adhered to. The concensus among American Plan operators was that this type of resort is definitely on the decline, and many of the American Plan resorts have already adopted the European Plan; others are planning to convert their present facilities to the European Plan or to a restaurant. The maintenance of a dining room is the most expensive and hazardous part of a resort operation, and owners are experiencing increasing difficulty in hiring competent and reliable chefs. Cases where a chef has left in the middle of a season have proved disastrous for some resorts, especially where the owner himself was not able to take over the kitchen. The difficulty is, of course, due to the seasonal nature of the work, since senior kitchen staff are really the only skilled help that the resort requires. One owner stated that unless he himself was capable of assuming the chef's duties, he would never have attempted to run an American Plan resort, and that on more than one occasion this skill carried him through a crisis period. It is suggested that the Provincial Departments of Tourism and Information and of Labour might well collaborate to train a cadre of resort chef staff.

Two additional trends in resort accommodation bear scrutiny during the current planning period. One is the establishment of camp grounds at resorts, which has proved very successful where attempted, and is likely to increase. It tends to provide the best of the two vacation modes (resorting and camping) while assuring the visitor of a camp site, by reservation, plus a somewhat more select clientele than at a public park. The other trend is to motel-type accommodation at resorts. A large proportion of additional accommodation is being built in this form, and the two newest resorts seen by the author (both less than 2 years old in 1964) had incorporated the amenities of the highway motel concept with those of a waterfront location typical of the more traditional resort. It would seem that this trend may be one of the most significant to appear in recent years, and may well be the successor to the prestige American Plan resorts of the pre-war era.

An inventory was taken of recent or planned additions and renovations at all resorts. Gross responses were as follows:

Recent Additions	30.1 percent
Recent Renovations	31.8 percent
Planned Additions	31.8 percent
Planned Renovations	28.4 percent

The most common reason given for additions was greatly increased business, whereas outdated facilities account for most renovations. For these resorts where there was no recent or imminent development most operators said it was not necessary. Very often, however, this response did not seem valid, and there were obviously underlying reasons that the operator was not willing to divulge. The next most important reason for no development was lack of investment capital. The extreme difficulty in securing small business loans was the most common complaint. The author is not prepared here to discuss the financial problems of the resort industry, however, it is readily apparent even to the casual observer, that if smaller resorts are to remain solvent a better scheme for extending credit to the entrepreneurs must be forthcoming. There is reason to believe that this is being investigated.

Most development is in accommodations, particularly housekeeping cottages and motel units, though a significant amount shows up in dining and recreational facilities as well. Investment in accommodation indicates an optimistic industry, which in turn reinforces the expectation of continued growth in resort traffic over the planning period.

COMMERCIAL RESORTS,
ANALYSIS BY ELECTRONIC DATA PROCESSING

The analysis described in this chapter employed electronic computation, and an evaluation of the process with discussion of its more prominent results will be undertaken.

Chi-Squared Analysis

This statistical technique is used to compare an observed frequency distribution with a hypothical frequency distribution. The size of the chi-squared value depends upon the difference between these two sets of figures. For a null hypothesis it is assumed that there is no greater difference between the observed and expected distributions of the pairs of variables than one is willing to attribute to chance. Where the null hypothesis can be rejected at a selected significance level, it may be assumed that there is a relationship between the two variables in question. This technique is particularly applicable to social problems involving two nominal scales. In applying chi-squared analysis to these data, there was no prior selection of a statistical level of significance, but instead the tests were run and results were tabulated for various significance levels.

In all, 127 pairs of variables were tested in N x M contingency tables. Of these 127 pairs, 114 were rejected as having no significant association (i.e., the null hypothesis could not be rejected). The remaining 13 pairs of variables exhibited chi-squared values which enabled rejection of the null hypothesis at levels of significance from a high of .01 to a low of .1. The following is a summary of the results by levels of rejection. (A complete list of variables tested is given in Appendix 3).

.001 to .01 Level. These highly significant interrelations showed up most strongly among pairs of physical-site characteristics. The only non-physical pair to appear was 'resort type' and 'resort appeal'. The latter variable was subjectively assessed by the field staff on the basis of the over-all impression a resort created by its site, facilities, situation and appearance. There is, however, strong reason to believe that these elements taken together vary with resort type and strongly influence the over-all guest attraction exhibited by a resort.

.01 to .02 Level. Two pairs of variables showed up here - both involving the 'appeal factor'. The degree to which buildings on the site were imaginatively located with respect to natural features (rather than for example, all coattages being in a row with little if any vegetative screening between) is important. The other was with respect to 'stage-of-life'. The appeal of a site will vary according to the preoccupations and activities of an age group. Families with young children prefer the safety factor of a shelving beach. Families

with teenagers prefer a waterfront site that lends itself, for example, to water-skiing. Elderly people will be attracted to a level site which is easily negotiated on foot.

.02 to .05 Level. This level correlates only 'water body' and 'foreshore', which at first does not seem particularly enlightening but upon examination reveals that in general the more 'attractive foreshore' characteristics, which must be sought out, are found on larger water bodies that offer greater variety of foreshore characteristics. This variety in turn provides an added attraction for the resort patterns. Thus for future surveys, the very size of a lake may be taken as a function of growth potential.

.05 to .1 Level. Interrelations significant at this level are evenly divided between physical and non-physical characteristics. The quality of 'backshore' relates to all of 'shore characteristics', 'shore site' and 'appeal'. 'Resort type' and 'foreshore' linking suggests that there is a strong interrelation between the 'type of water-oriented activity' and 'type of accommodation' provided.

The subjective variable 'attractiveness' which was based purely upon visual appeal is correlated with the degree to which 'additions' have been invested in by the resort management. It indicates that those sites with high natural and developed attractiveness are the ones where buoyant operations stimulate new capital inputs. This is corroborated by the fact that 'planned additions' are directly proportional to the 'percentage of repeat business'.

Aside from the results of the chi-squared analysis for their own value, it was hoped that it might indicate the more significant variables to use for input in later analysis.

Factor Analysis

The factor-analytic technique serves two main purposes in basic research: either to produce hypotheses or to test them. It allows the researcher to do four things:
  1. Make use of naturalistic observation;
  2. Establish the importance of unitary factors by their empirical connections;
  3. Produce rather than require hypotheses;
  4. Allow the experimenter to avoid a priori assumptions, and build his causal relations upon the results of the analysis (2).

In a study such as that of Commercial Resort Travel, upon which little work has previously been done, it was necessary to administer a questionnaire involving more than 200 distinct variable responses. To reduce this great mass of unstructured data to manageable proportions, it was readily apparent that a selection of variables for more intense investigation had to be made. While the author believed there were a number of significant variables at work, he preferred not to project his a priori postulates into an analysis such that results would be a reflection of his subjectivity. In order to avoid this bias, the chi-squared analysis discussed above was attempted, in which a large proportion of the variables

were tested in pairs for intercorrelation. Because of the nature of the data, very high correlations were not expected, but a sufficient number below the .1 level of significance were obtained, to indicate areas in which use-indicators could be expected. Partly on this basis, and partly on what of necessity were more subjective grounds, a list of 89 variables was developed for input into a factor analysis (refer to Appendix 3).

The aim of the technique is, briefly, to group about a set of axes in multi-dimensional space, those clusters of variables which have some hypothetical characteristic in common.

The technique used in this analysis is known as the Principal Factor Method (3). It was decided that analysis should be terminated at the extraction of the tenth factor (or principal axis), based upon the knowledge that beyond this point the variance explained is normally less than the variance among individual variables.

Data were on a regional basis, by Resort Areas, previously resolved to coincide with existing township boundaries. That the method introduces an assumption of regional differentiation must be acknowledged, and its detrimental influence accepted. Though these regions represent somewhat varying geographical units, it must be pointed out that the variation in physical and environmental attributes within a region are often as great as those among the regions. It must be emphasized, therefore, that at this stage it was not the purpose of the factor analysis to attempt the delineation of new regions, but rather to produce a reduced set of variables, in the form of principal factors which would assist in showing the basic characteristics of the Resort Areas.

Due to the constraints on numbers of variables imposed by the computer programme, eighty-nine variables were selected so that the input was a representative array of origin, link and destination variables (refer to Appendix 3). They were selected with this in mind using whatever indication of significance there was up to that point. Variables 49, 50, 70, 71 and 89 were calculated expressly for use in this and the regression analysis. Altogether, two factor analyses were run. The first used raw data, and the preliminary results were reported in August, 1965. Realizing that a better result should be obtained from the use of standardized data, this refinement was calculated, and the second run utilized the variable input values in this form. The results reported here are on the basis of the second analysis.

The output from a factor analysis gives in addition to the primary information (viz., factor loadings, eigen values, communalities, etc.) a matrix of simple correlations between all pairs of variables. Before discussing the factor analysis results per se, a brief review of the simple correlation matrix from this source will be presented.

All correlations from this source with co-efficients of .6 or more were grouped in classes of .1 range, and the complete list appears as Appendix 4. In all, there were 760 correlations of .6 or more. Of these 203 were .8 or more, with 20 of .9 or more.

It was at this point that the true complexity of the entire analysis was revealed. When one attempts to deal with issues as intimately involved in individual human choice as 'how', 'when', 'where' and 'why' vacations are undertaken, the most that can be hoped for (given our existing techniques) are general patterns; not concise answers. The point is reiterated that this survey was designed to provide only one early stage in what will hopefully develop into a more integrated system of studies of the whole recreational field. If this is borne in mind then the negative as well as positive findings may be beneficial and the gaps left and the questions raised will perhaps be as useful to future research as the questions actually answered. Reinforcement of the fact that we have only very meagre knowledge of the forces behind mass recreation will, it is hoped, stimulate greater interest in its research through diverse disciplines. The very complexity of the issues raised heightens our awareness that recreational studies cannot be the domain of a single intellectual persuasion.

A goodly number of the correlations that show up at any level are of dubious value when closely examined. While they are all in statistical terms 'simple', few if any may be defended as direct causal relations, since an indeterminate number of forces bear upon any correlation and a significant co-efficient may indicate a complex causal chain. It is the aim of the factor analysis discussed below to lump together those variables that relate to a common variable. Despite this, some facts may be deduced from an analysis of the simple correlations.

At the .9 level (or higher), the following correlations must be mentioned.

(a) American Plan and European Plan Resorts With Teenage Families and Groups of Families

Families with teenagers are generally financially better off than those with young families due to the age of the father, hence are less prone to be seeking only the most economical type of vacation. Similarly, the teenager is more likely to accompany parents to a location where other guests in his age group may be found. Where congenial families have met at a resort, the probability of their returning for several successive seasons is greatly increased. This reasoning is substantiated by the same high correlation between couples with teenage families and groups of families.

(b) Professional Class, with Camping at a Resort

This phenomenon has been mentioned earlier. The ORRRC Report (4) states that in the USA the largest proportion of campers come from the 8,000 to 10,000 dollar income range. This income bracket embraces not only professional but also technical workers, craftsmen and the foreman class. Therefore, while economic status is similar, there may be marked division in social status. For this reason, it is hypothesized that ardent campers in the upper social class may feel a greater attraction toward camping in the environs of a resort, while lower social classes feel no dissatisfaction with the less 'select' campers and at publicly owned campgrounds.

(c) More than 500-mile Trip with Complaints about Road Widths

The tensions built up on a longer trip may make the driver less willing to cope with substandard driving conditions toward the end of his journey. That this is the only complaint registered against driving conditions

at this level seems highly significant for highway planners. Vacationers undertaking a relatively extended trip are normally more apt to look upon the drive itself as an integral part of the total recreation experience. This type of person normally does not object to the varied road conditions he encounters. Because he probably enjoys driving, curving roads and hilly terrain are a pleasing relief from turnpikes. He is willing to accept the traffic congestion that may be met from time to time. Comfort is not uppermost in his mind, so that a poorly paved surface, or gravel roads, do not tend to annoy him. What he does object to, however, is a hazardous road, and this element of hazard is present on a narrow right-of-way. The point here is that in planning improvements on secondary recreational roads, paving is not necessarily essential, but a safe two-lane width is. Similarly, in the rebuilding of first-class recreational highways (of which Highway 35 north of Lindsay is a good example) the Department of Highways should be aware of the aesthetic qualities of the existing right-of-way and resist the temptation to make the road a high-speed artery. 'Driving for pleasure' is North America's number one recreational pursuit, and if we are genuinely interested in catering to the recreationist, highway planners must recognize that there are distinct differences in the design requirements for a scenic recreational route and a conventional multi-purpose highway. In Ontario, the opportunity exists to provide scenic routes second to none in the east.

A complete discussion of all correlations at the lower levels is not undertaken here; however, the data offer innumerable opportunities to consider varying interrelations among all the classes of variables. A complete list of variables is given in the Appendices to this report but only those site and situation, resort facility and resort morphology variables which bear upon trip characteristics will be considered here.

.8 to .89 Level. Variables Correlating with User Characteristics. A rocky foreshore, even though the most common type at resorts in the shield, is particularly attractive to the family with older (teenage) children, and the groups of families they are associated with. The same shore type relates to European Plan and American Plan resorts, which earlier were suggested as being more popular among guests with teenagers.

The occurrence of a licensed dining room is essentially a situational factor in that it is dictated by the local liquor laws. Liquor sales are correlated with motel-type accommodation, indicating that new establishments are more likely to offer this accommodation type and be found in 'wet' townships.

Professional and white collar classes are found about equally at American Plan and Housekeeping resorts depending upon age, with younger families more apt to select the latter. The younger clientele look for resorts with a wider range of recreational facilities (often a recreational director) and particularly water-skiing. (The last two variables are in themselves correlated at this level.) A gift shop is apparently very popular and is correlated in turn with resorts at which additions are planned. The over-all pattern suggests that this client group go primarily to Class IV or higher resorts.

Variables Correlating with Trip Characteristics. Housekeeping resorts do not attract trips in large numbers from more than 300 miles, while American Plan and European Plan resorts commonly indicate a large proportion of guests from the 300 - 500 mile range as well as from more than 500 miles. This is undoubtedly a function of income since it is the higher economic levels that take the longer trips and are able to afford the more expensive American Plan type accommodation. It also circumscribes the profitable advertising radius for House-keeping resorts, as opposed to American Plan resorts. Families with young children are less prone to undertaking a trip in excess of 300 miles than are those with older children. The longest trips are generated among couples of all age groups travelling without children. People taking only a single week of their vacation seldom travel more than 300 miles from origin to destination. Repeat business is highest (80 to 89 percent) among professional-class clientele and groups of families that frequent the American Plan and European Plan resorts. Families with teenagers rank next with their repeat business ranging from 50 to 79 percent. In general, trip length is a direct function of socio-economic status.

.7 to .79 Level.   Variables Correlated with User Characteristics. At this level, couples with young families show up at American Plan resorts suggesting a range of preference from the Housekeeping resort attraction at the previous level of correlation. The same group is found at combined American Plan and Housekeeping establishments, making the picture more complete. Young marrieds without family (being more mobile) are more likely to find the European Plan resort an appealing plan. Whether or not the blue-collar worker has less sophisticated recreational tastes is debatable; however, his preferences are for a wide sand beach foreshore where swimming only is the most prevalent form of activity. The large crowds ordinarily found at the beach sites may be somewhat less distasteful to this group, and the fact that most of our best sand beaches are adjacent to highly urbanized resort communities provides a larger choice of relatively less expensive accommodation. The blue-collar worker is predominantly in the class with young families. The inference here is that the younger generation of blue-collar workers are the members of this socio-economic level making most use of recreational facilities. 'New Canadians' make up a large proportion of this element.

Variables Correlated with Trip Characteristics. The preference for one week stays at a resort is correlated at this level with all of American Plan and Housekeeping type accommodation, families with teenagers, white-collar workers and high repeat business (80 to 89 percent).

In terms of trip length, a number of criticisms of road conditions arise. For the trip less than 100 miles, traffic congestion is the most unpleasant aspect. This is to be expected since the bulk of recreational traffic on any route is still largely intact within that range. This is an indication that the Highways Department should investigate carefully the feasibility of constructing additional high-speed controlled-access arteries north from metropolitan Toronto to relieve traffic in the non-recreational zone, through which most trips pass before the gradual dispersion commences at the edge of the primary recreation areas.

As with the above short trip, the motorist on an intermediate length trip (200 to 300 miles to the recreation destination) is not 'driving for pleasure'. His major complaints were curves and hills, as well as signing. The aim of this motorist is to complete the trip in a minimum length of time under minimum driving strain, and he objects to any conditions

that frustrate this goal. While his desires may be catered to on primary routes, the comment was made previously, that on secondary recreational routes the aesthetics of 'driving for pleasure' must be recognized and incorporated. In some cases, this may be to the detriment of travellers who are familiar with the area and have become inured to its scenic qualities. Although inadequate signing appeared as a complaint at this level, its correlation with longer trips (300 miles or more) seems more pertinent. Drivers on this length of trip are less likely to be familiar with their entire route and hence place greater dependence upon road signs. Sign complaints derive almost exclusively from tertiary routes, where local roads authorities have failed to rectify this shortcoming. The Department might be well advised to instruct all regional offices to assess signing deficiencies on non-provincial roads in their regions and recommend specific needs to the local authorities.

A particular deficiency that existed in provincial sign policy is the marking of outstanding tourist attractions. The deep red trillium sign has been adopted for such destinations as the Stratford Festival, Fort Henry, Upper Canada Village, etc. It is suggested, however, that there are many less-renowned attractions that deserve the services of this or another type of sign, if tourists in Ontario are to be encouraged to leave the highways and sample the less grandiose but more common attractions in Ontario.

.6 to .69 Level. Two major points are evident at this level.
1. The percentage of repeat business is inversely proportional to the socio-economic class of patrons.
2. The percentage of repeat business tends to increase with trip length up to about 500 miles beyond which it drops off. Over-all the modal trip length ranges from 300 to 500 miles in which range, repeat business is from 50 to 90 percent. The presumption is that if data were collected for trips beyond 500 miles, the curve would fall rather steeply to a very low repeat business beyond 1000 miles.

Analysis of Principal Factor Loadings. The programme used carried the analysis to 20 principal factors. The entire set of factors accounted for 93.76 percent of variance. In fact the last four factors contributed nothing, so that the cumulative variance accounted for after 16 factors was the same. Table 6 shows the percentage variance accounted for by each factor and cumulative variance explained by each additional factor.

It is noted that over 50 percent variance is explained by the first 3 factors and over 75 percent by the first 7. On the basis of the factor analytic literature reviewed, conclusions were drawn primarily on the basis of only those factor loadings of .5 or larger. Beyond the 10th factor, there was only one loading at this level (on the 13th factor) and in fact beyond the 5th factor, significant loadings were so rare that it was scarcely possible to make any deduction as to the nature of the factor.

Factor 1. A rather complex array of some 45 variables load significantly on this factor. They have been broken down in a number of ways in an effort to expose the common variable to which they are all related (refer to Appendix 5). The most striking characteristic of the factor remains the range of significant variables that suggest a highly developed recreational zone. This is supported by the middle to long trip length and high repeat business. The majority of guests are travelling with a family. There are no variables that suggest the occurrence of

lower class resorts. For this reason, Factor 1 is felt to be a measure of relative development of a diversified resort industry. The degree to which any area has a relatively high concentration of desirable resorts is a collective asset. In the same way that industries are prone to focus upon one locality, resorts derive mutual benefit from a certain amount of concentration, This applies, however, to a pattern of resort development, which might be referred to in settlement geography as ranging from open dispersed to open agglomerated. Where the latter has developed there is obvious waterfront lineation. (It does not refer to the highly nucleated resort communities, which have been referred to by Wolfe as 'urbanized resorts', however, the presence of these nuclei scattered throughout the study area tends to give the resort industry an over-all pattern of dispersed agglomeration when viewed on a smaller scale map.) This factor is then a measure of the attraction of this type of resort area for the general public. On this basis, almost one-third of all resort traffic may be attributed to the existence of a sophisticated non-urban resort industry offering the public a wide range of choice in accommodation and facilities.

TABLE 6, VARIANCE EXPLAINED BY PRINCIPAL FACTORS

FACTOR NUMBER	PERCENT VARIANCE	PERCENT CUMULATIVE VARIANCE
1	31.92	31.92
2	12.70	44.62
3	11.53	56.15
4	8.09	64.23
5	4.58	68.82
6	4.75	73.57
7	3.11	76.68
8	2.85	79.53
9	2.69	82.22
10	2.33	84.55
11	2.98	87.53
12	2.17	89.70
13	2.06	91.76
14	.87	92.63
15	.63	93.25
16	.40	93.26
17	.00	93.26
18	.00	93.26
19	.00	93.26
20	.00	93.26

Factor 2. The number of variables loading significantly on this factor is one-third that of Factor 1, however, it is sufficient to draw clear distinction between the two. Highly correlated with this factor are strong indicators of the nucleated or 'urbanized' resort communities (mentioned earlier for purposes of classification). These urbanized centres are almost invariably located on an expansive sand beach with shelving foreshore. Most are within an easy day's drive of major urban places. Repeat business tends to be lower (10 to 20 percent and 40 to 50 percent). This bimodal pattern separates two exclusive populations: the lower range indicates an element attracted through curiosity or lack of awareness of attractive resort areas, but who return in limited numbers having found their vacation experience less than satisfying. In general, this population is made up of those at the upper end of the socio-economic range found at these resorts. The second population, represented by the higher range of repeat business, comes from the lower socio-economic levels, revealed on the factor as the 'blue collar class'. They will be more apt to seek accommodation at the 'Housekeeping' or 'Lodging Only' resorts, the latter of which are most commonly located in a nucleated resort community. This population, through

cultural background tends to feel much more comfortable in the environment, of what in the vernacular is referred to as a 'swinging spot', and will be more apt to return for a number of seasons. Large proportions of both populations are made up of young people. Young married without family, loads significantly on the factor and the failure of young unmarried clientele (which in fact are a very important element to the resort in these localities) to correlate above .5 is looked upon by the author as an undetected flaw at some point in the data recording or processing. An additional explanation lies in the fact that this group is more apt to take day trips and not seek overnight accommodation.

The short trip length coincides well with the high incidence of complaints concerning poor road surface and bad intersections, as well as the optimism expressed for improved highway conditions following the completion of current construction.

The fact that the characteristic 'length of stay' loading on this factor is a 'month' rather than a weekend or even two weeks seems to be an anomaly. While it might be dismissed as such, there is some evidence that rising incomes at the lower social levels may be starting to reflect a pattern of the weekend-commuting-father with the family staying at the cottage (in this case rented). This was traditionally an upper class routine but is no longer exclusive to that group.

This factor is then characteristic of nucleated resort development. It accounts for 12 percent of variance and with Factor 1, represents a cumulative explanation of variance of 44.62 percent.

Factor 3. This factor seems to be a measure of the generating capacity of recent prestige resort development. This is indicated by high loadings at motel type accommodation with a licensed dining room or bar facilities. (Without benefit of the latter, few resorts are expanding or being built.) The narrow sand beach site shows location away from the established resort nucleations of Factor 2. The 150 to 200 mile trip range underlines orientation to major urban places. The American Plan variable and a 'young married without family' clientele suggest the attraction of these resort destinations for young people in the higher socio-economic brackets, with an optimistic outlook reflected in the loading of 'planned additions' and 'renovations'. Although repeat business is shown as relatively high (60 to 80 percent) it is based in most cases on a short span of operation and hence the mode may be highly skewed to the right.

This factor adds an additional explained variance of 11.53 percent, making a total of 56.15 percent.

Factor 4. On somewhat limited evidence this is designated as an Impulse Accessibility Factor. Low repeat business, short trip length, traffic congestion complaints and weekend-stay all point to the fact that such trips are undertaken on the spur of the moment for a weekend outing, and are repeated rather infrequently. The 'lodging only' and 'Housekeeping' accommodation implies a lower class clientele and it would be interesting to find the proportion of such trips taken immediately following a pay-day. The only highly anomolous variable is a 'season stay', which thus far defies explanation.

An added 8.09 percent of variance is explained by this factor.

Factor 5. This derives from the traffic attributable to an Extended Trip Factor. Short mid-week stays, relatively low range of repeat business, bay-head sites (which are normally within sight of or very close to the adjacent highway) give the hint of off-the-road, in-transit business. The preference for housekeeping cottages indicates that many of these tourists are travelling with housekeeping equipment. This suggests particularly campers, who through inclement weather have sought the refuge of accommodation other than their tent. Specific resorts that fit this pattern were situated most often on highly travelled routes and in the vicinity of a Provincial Park.

Factor 5 explains 4.58 percent of the total variance, for a cumulative explained variance after the first five factors of 68.82 percent.

Beyond the fifth factor, the significant loadings are so few that one can base deductions only on the slimmest evidence. It is, however, worthwhile to mention some of these, if only to allow for possible future comparison.

Factor 6. Correlations with cobble-beach (a rather undesirable shoreline characteristic) and golf, suggest Non-Water Oriented Resorts with the particular attraction of golfing.

Factor 7. This is apparently another measure of the growing recreational pressure from the lower socio-economic class, with weekend trips by blue collar workers loading significantly. With additional research this could emerge as a factor measuring the 'new populations' in the resorting public and rising disposable income.

Factor 8. It associates additions completed with miles of gravel access road and may reveal a travel comfort factor.

Factor 9. The only significant loading is the 'availability of boats'. As such, it seems to be opposite to the non-water orientation of Factor 6. It measures the unique attraction of boating and could be developed to assess the drawing power of rentals at marinas.

Factor 10. Road Width is again a single indicator on this factor. Although it seems relatively unimportant at this level, the very fact that it emerges by itself may help to substantiate a comment made earlier that for the motorist who enjoys travelling on secondary roads, the safety element introduced simply by widening the road would greatly enhance his recreational experience.

The cumulative variance explained by these ten factors is 84.55 percent.

On the final ten factors, there is only one significant loading. That is Average Cost per Accommodation Unit per Night. At the start of the study, one of the variables which intuitively, it was felt, would be very important in any index of attraction would be cost. This apparently is not the case, since a large degree of social differentiation takes place prior to considering the question of cost. Therefore, guests tend to be drawn by factors other than price to resorts where rates are in keeping with their respective incomes.

Having now discussed these patterns that emerge from the study area as a whole, we shall now investigate some of the regional deviations. An earlier section dealt with certain physiographic differences which have a bearing upon the resort industry. This was only the background against which the more pertinent variations in use characteristics are set. References will therefore be made to a series of sub-analyses on a regional basis. These will take the form of an analysis of the factor scores at the Resort Area level, and a number of graphic analyses.

Analysis of Factor Score Mapping. The area factor scores, derived from the factor analysis. The method used is almost identical to that outlined by B.J.L. Berry (5).

Essentially a factor score is a measure of the correlation between the common element of the principal factors of the varimax rotation, and a specified geographic area. In this case, maps of the factor scores (transformed to standard deviation units about the mean score) on the first 4 factors have been produced. In analysing these maps, comparisons will be made with the measured frequency of certain variables in the resort divisions in order to summarize the study findings.

The table of Factor Scores is reproduced in Appendix 6 with the transformations.

Factor 1 - Relative Development of a Diversified Resort Industry (Figure 2). The scores of seven resort areas exceed plus or minus one standard deviation. Those which have high positive correlations with the factor are areas 18 (+4), 13 (+2) and 14 (+2) and represent the Rideau Lakes, Muskoka Lake and Lake of Bays areas. They include the three main core areas of the Ontario Resort industry. The exceptionally high score in Area 18 may be due to a greater percentage of high-class resorts. Although Areas 13 and 14 have just as many of these types of resorts, they are more frequently interspersed with lower-class resorts catering to the broader spectrum of patrons coming from Metropolitan Toronto. The Rideau Area has relatively less of this type of development. While it might be expected that Areas 15 and 23 should also have scores of +2, they apparently have a great enough incidence of lower-class resorts to reduce them to the norm. They do, however, register a +1 score.

Four areas obtain negative scores, but for differing reasons. Areas 25 and 35, score low due to the more highly urbanized nature of Port Perry and the Lake Huron resort communities respectively. Apparently, the dispersed development in the Penetanguishene Peninsula tends to counteract concentrations around Wasaga Beach and keep the score in the normal range.

KEY

6	SUDBURY
7	MANITOULIN ISLAND
8	NORTHEASTERN ONTARIO PORCUPINE
9	FRENCH RIVER AND LAKE NIPISSING
10	30,000 ISLANDS OF GEORGIAN BAY
11	PARRY SOUND WEST
12	PARRY SOUND EAST
13	MUSKOKA LAKES
14	LAKE OF BAYS
15	HALIBURTON HIGHLANDS
16	ALGONQUIN PARK
17	LAKELAND OF RENFREW
18	RIDEAU LAKES AND 1,000 ISLANDS
19	OTTAWA RIVER
20	EASTERN ONTARIO
21	EASTERN ONTARIO
22	RICE LAKE
23	KAWARTHA LAKES
24	TORONTO ISLAND
25	LAKE SCUGOG
26	LAKE ONTARIO, EAST TO OSHAWA
27	LAKE ONTARIO, WEST TO BRONTE
28	TORONTO INLAND
29	LAKE SIMCOE
30	LAKE COUCHICHING
31	HAMILTON OR BURLINGTON
32	SOUTHEASTERN COLLINGWOOD
	TO WAUBAUSHENE
33	SOUTHWESTERN OWEN SOUND
	TO COLLINGWOOD
34	BRUCE PENINSULA
35	GODERICH TO SOUTHAMPTON
36	SARNIA TO GODERICH
37	CENTRAL LAKE ERIE
38	INLAND SOUTHWESTERN ONTARIO
39	ST. CLAIR RIVER
40	WINDSOR AREA
41	WESTERN LAKE ERIE
42	EASTERN LAKE ERIE
43	NIAGARA RIVER AND LAKE ONTARIO
44	LAKELAND OF RENFREW
45	EASTERN ONTARIO
46	INLAND SOUTHWESTERN ONTARIO

FIGURE 2, FACTOR 1, RELATIVE DEVELOPMENT
OF A DIVERSIFIED RESORT INDUSTRY*

Prince Edward County (Area 20) and Parry Sound East (Area 12) score low due to absolute underdevelopment.

When one scans the percentage figures for Divisions II and III, it will be seen that in general those variables that load highly on Factor 1 show an above average frequency of occurrence. This map, as well as empirical evidence, suggests that the greatest development potential for this factor exists in Areas 10, 11, 12 and 17.

Factor 2 - Nucleated Resort Development (Figure 3). In order to avoid discussing the inverse relations as initially plotted, the signs of all scores have been reversed. The resulting map (Figure 3) shows Area 32, scoring as +3 on this factor as it would be expected to. An anomaly occurs in Area 35 which scores -2 according to this analysis. The area sample, however, was regionally biased to the northern portion of the unit so that the Grand Bend-Ipperwash areas

Resort Areas adapted to Township Boundaries (After R.I. Wolfe)

were not included. The author carried out a subsequent study in the Bosanquet Township-Grand Bend area and on the basis of this, it is believed that a more realistic score for Area 35 should be +2. Area 25 also ranks -2, which might not be expected. There is, however, a great deal of new dispersed development on Lake Scugog and Scugog Island which neutralizes to a large extent the nucleus of Port Perry.
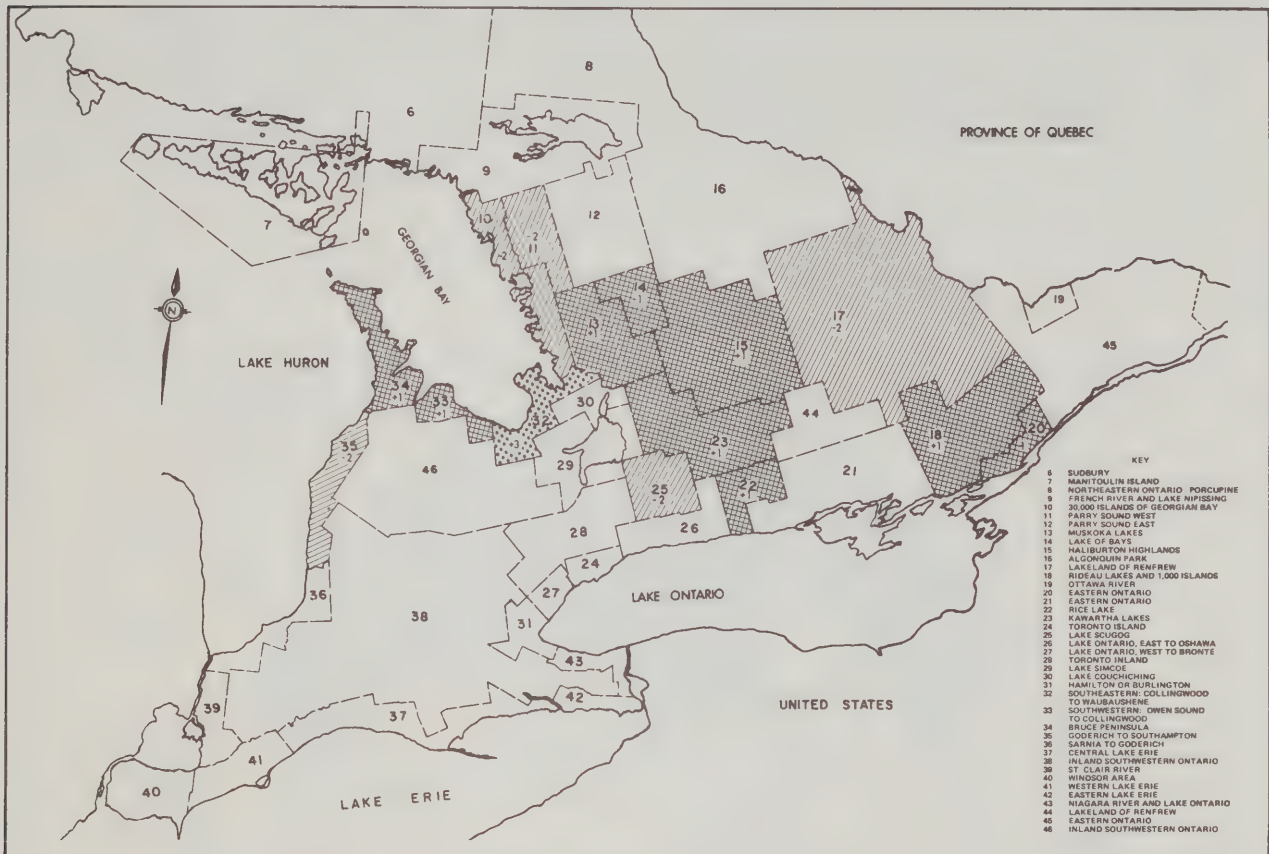
FIGURE 3, FACTOR 2, NUCLEATED RESORT DEVELOPMENT*

All other areas ranking -2 (except the above), viz. 10, 11, 12 and 17, are in the recreational fringe and exhibit as yet, practically no exceptions to the dispersed pattern. These again outline the regions of maximum potential growth.

It would seem particularly important for highway planning to recognize the inadequacy of present north-south access routes from Highway 401 to Northwestern Lanark County, northern Frontenac County and southern Renfrew County. A route which would link Sharbot Lake along the present alignment of Highway 509, with Black Donald Mine at the southern end of Highway 508 and on to Highway 132 at Dacre merits consideration. An additional link that should be studied is the extension of Highway 42

* Resort Areas adapted to Township Boundaries (After R.I. Wolfe)

north from Westport to Highway 7, thus giving direct access to the area from the Ivy Lea Bridge. If the Highway 508-509 route were developed, it would be best to extend Highway 42, easterly from Bolingbroke to Sharbot Lake, thus giving an almost direct route north to Pembroke and Highway 17.

Factor 3 - Recent High Class Resort Development (Figure 4). Five areas stand out beyond the norm on this factor. Those with a negative score are Areas 18 (-3), 23 (-2) and 25 (-2). Area 18 ranks high on Factor 1, while Area 23 is within one standard deviation of the mean. Area 25 scored -2 on Factor 1. The explanation for their similarity on this factor derives from the mediocrity of most newer establishments. There may have been a decline in the quality of accommodation in Area 18, while Areas 13 and 25, being subject to the influx of new populations from lower socio-economic levels, has promoted a less desirable form of development in comparison with some other areas.
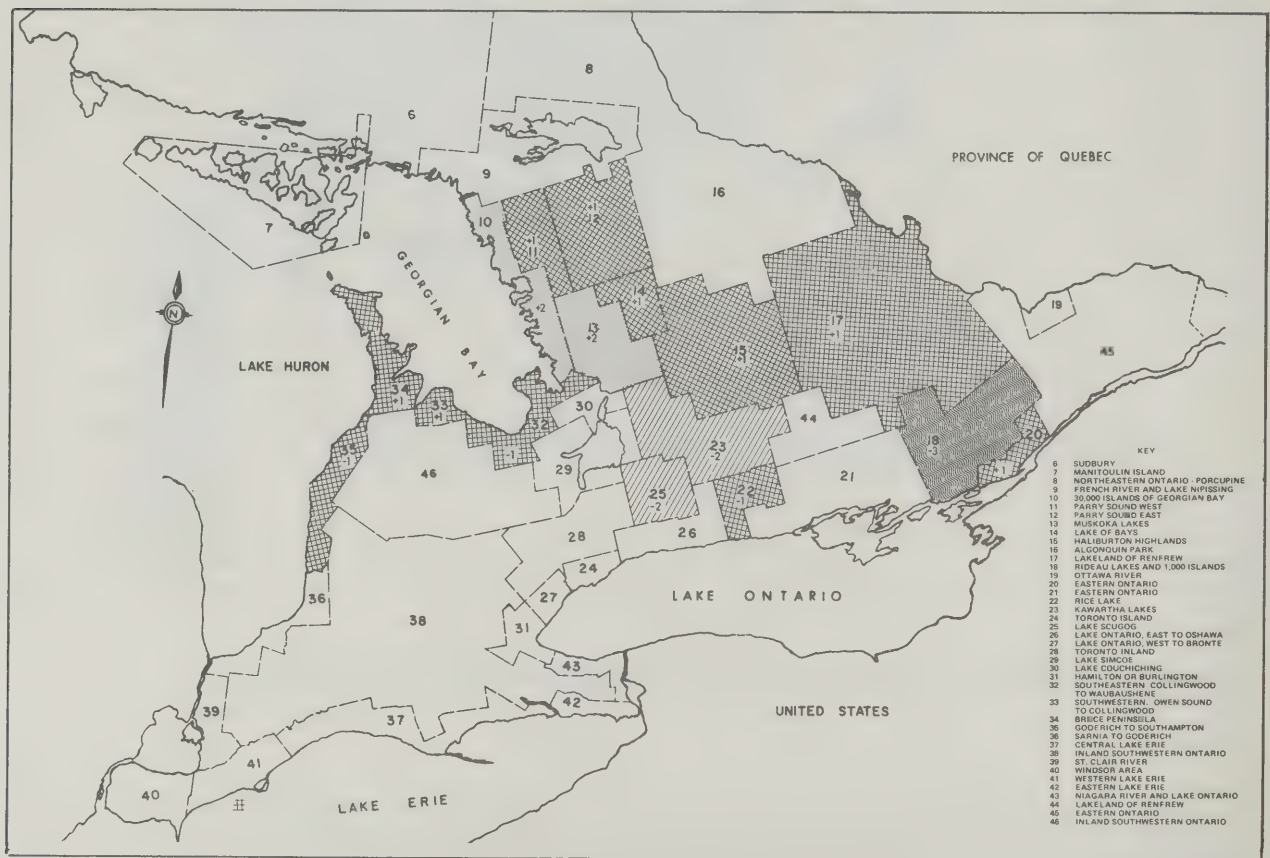
FIGURE 4, FACTOR 3, RECENT HIGH-CLASS RESORT DEVELOPMENT*

Resort Areas adapted to Township Boundaries (After R.I. Wolfe)

Conversely, Areas 13 and 10 are experiencing slower rates of growth, due to already densely occupied recreational land (of the dispersed type). Where developments are occurring, however, the capital costs are such, that to recover investment, a high economic level of clientele must be catered to. The northern portion of Area 10 has had the added stimulus of the Trans-Canada Highway to bring increasing volumes of tourists through its territory. The result has been one of the rapidly advancing edges of the recreational fringe.

Factor 4 - Impulse Accessibility (Figure 5). Only two areas deviate from the norm on this factor. Area 23 shows a score of +4, indicating the degree to which the short trip length contributes to impulsive recreation excursions. Its location in the Central Ontario Route of the Trans-Canada Highway accounts for the higher proportion of unplanned stopovers on the 100 to 500 mile trip.
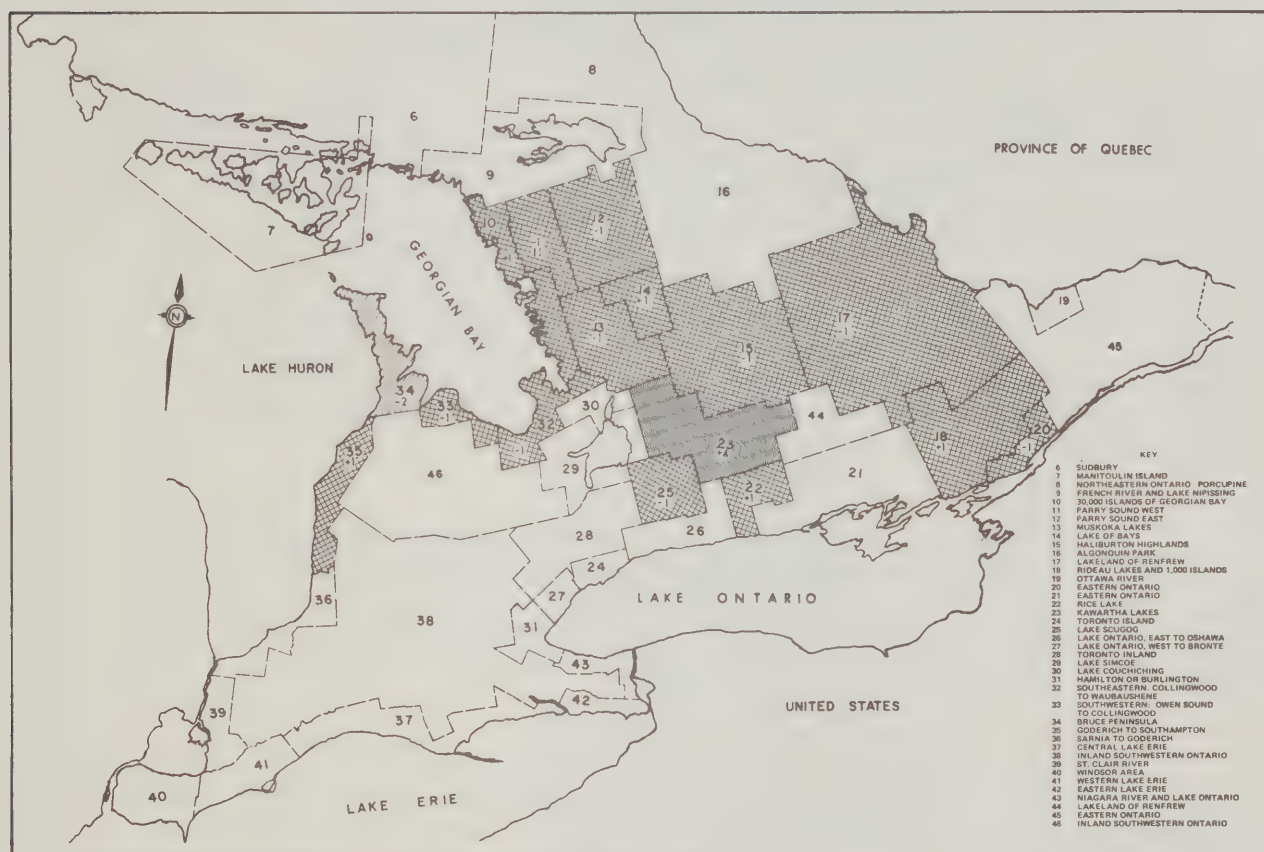
FIGURE 5, FACTOR 4, IMPULSE ACCESSIBILITY*

The area to which people are least likely to make an impulsive trip is to the Bruce Peninsula (Area 34). This is due to the length of trip involved, its less widely recognized attractions, and its somewhat unappealing selection of accommodation. The

Resort Areas adapted to Township Boundaries (After R.I. Wolfe)

31

latter fact is probably the major reason for usually low repeat business, certainly not a lack of aesthetic quality.

These four factors mapped, account for 64.23 percent of the total variance in resort use.

The Graphic Analysis

Four graphic analyses were carried out to facilitate the explanation of variables which it was felt had not been adequately covered thus far. The first three are sets of histograms dealing with regional variations in trip characteristics. The fourth is a cluster analysis of accommodation type with respect to total seasonal use.

Peak Period. In general, the peak extends from mid-July to mid-August (refer to Figures 6 to 13). While certain anomalies occur, the more remote Pre-Cambrian Shield area reaches a peak during the third week of July, one week earlier than the areas in Peninsular Ontario. This may be due to its more desirable vacation characteristics. During the peak weeks, however, the northern zone reported 87 percent of resorts filled while the more accessible areas were 98 percent filled. The percent of resorts filled during the third highest week in Peninsular Ontario was 91.5 percent - some 4 percent higher than the highest week in the Pre-Cambrian Shield. The accessibility factor appears to be critical in the south with a higher proportion of impulse vacationing (at a specific resort) over pre-arranged reservations in the areas farther from the major origin zones. No recreational Division other than IV (in which the absolute sample is so small as to be highly suspect) reports having over 90 percent of resorts filled for more than three weeks in the season.

As would be expected in the Shield Zone, Division II (Huron-Ottawa Tract) the peak is higher and maintains itself at the above 90 percent level for three weeks as opposed to the less intensely developed Division III which in addition is farther from a major user-origin centre. The Eastern region, however, has a higher proportion of business during the first two weeks of July, but tapers off more rapidly during the latter half of August.

Comparing the divisions in Peninsular Ontario, the peaking is generally higher than on the Shield, but early and late season business is less intense. Division V (including the Kawartha Lakes) has a rather even rise and decline of business from the first of July to the end of August. This may be due to the fact that it has a resort industry not unlike that of some areas in the Shield, fitting quite well the characteristics defining Factor 1 in the Factor Analysis. Division VII, however, (Georgian Bay South) is more nearly of the Factor 2 type and shows a rapid rise and fall of business from mid-July to mid-August, coinciding with the peak of industrial and clerical vacations. The peak business period of the Bruce Peninsula rises rapidly at mid-July and holds steady until mid-August. The greater incidence of two week vacations in this more remote area may account for this.
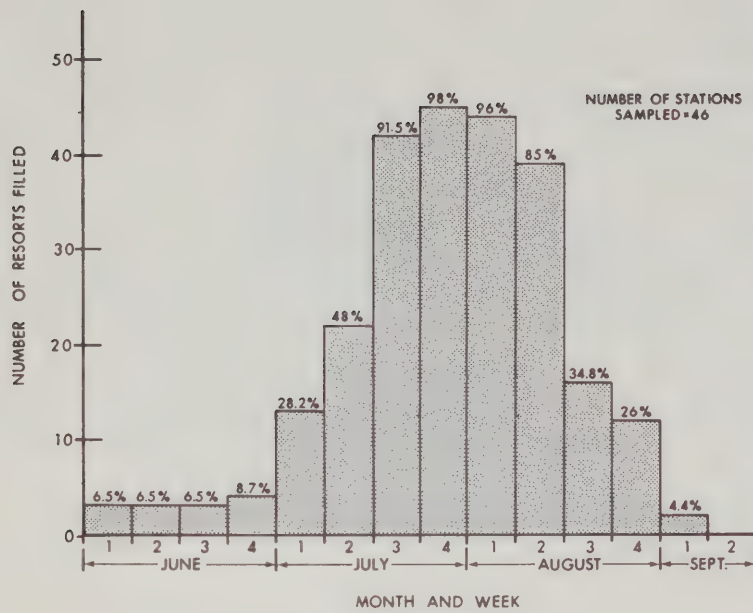
**FIGURE 6, NUMBER OF FILLED RESORTS
(BY WEEK), PENINSULAR ONTARIO**
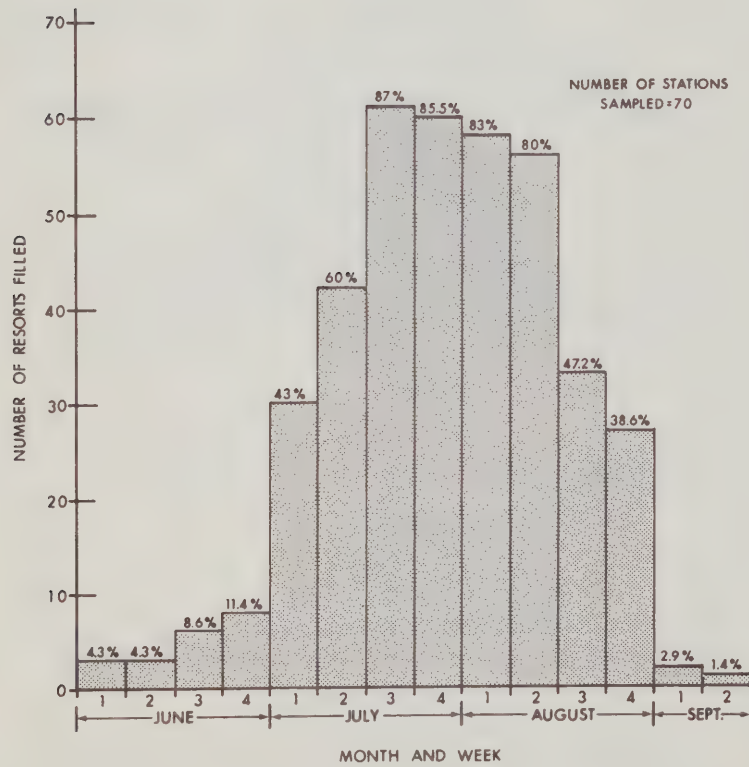
**FIGURE 7, NUMBER OF FILLED RESORTS
(BY WEEK), PRE-CAMBRIAN SHIELD**

33
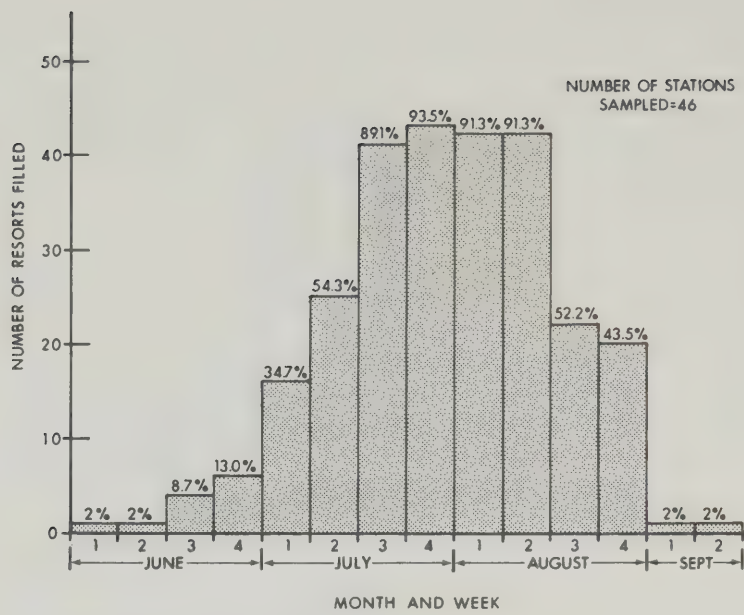
FIGURE 8, PEAK PERIOD, DIVISION II
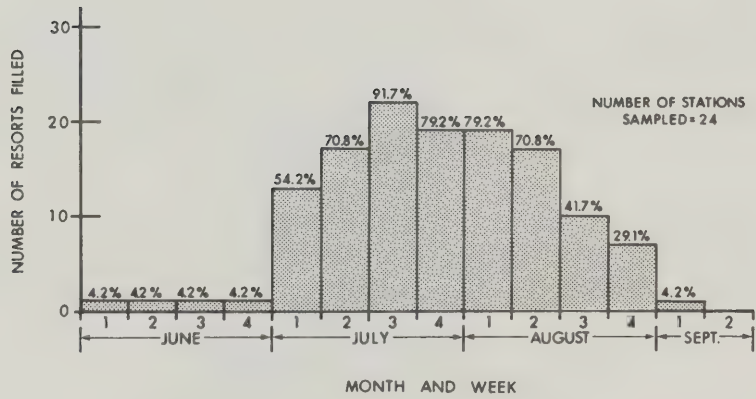
FIGURE 9, PEAK PERIOD, DIVISION III
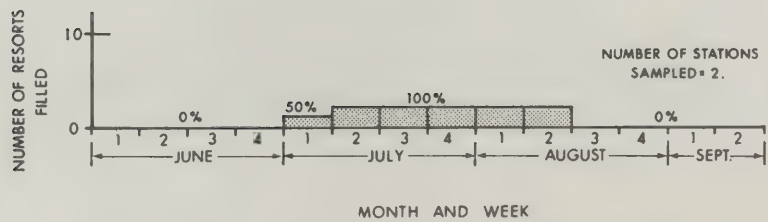
FIGURE 10, PEAK PERIOD, DIVISION IV
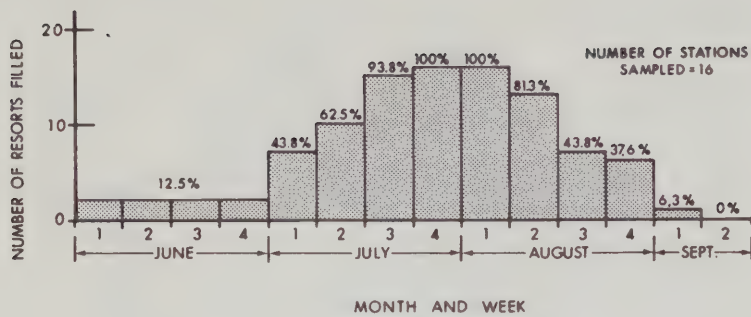
FIGURE 11, PEAK PERIOD, DIVISION V
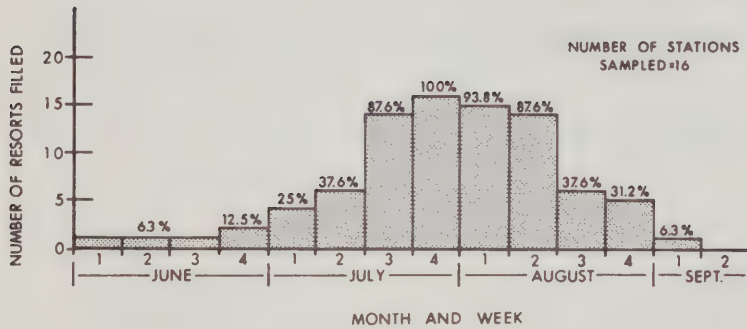
FIGURE 12, PEAK PERIOD, DIVISION VII
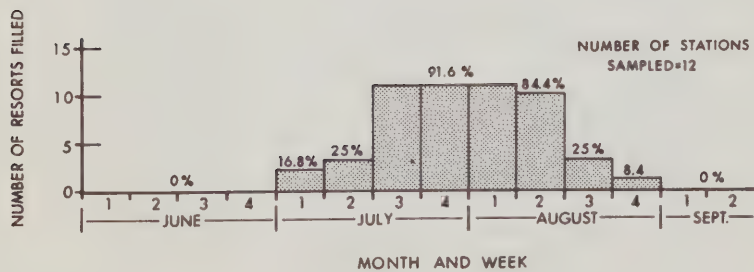
FIGURE 13, PEAK PERIOD, DIVISION VIII
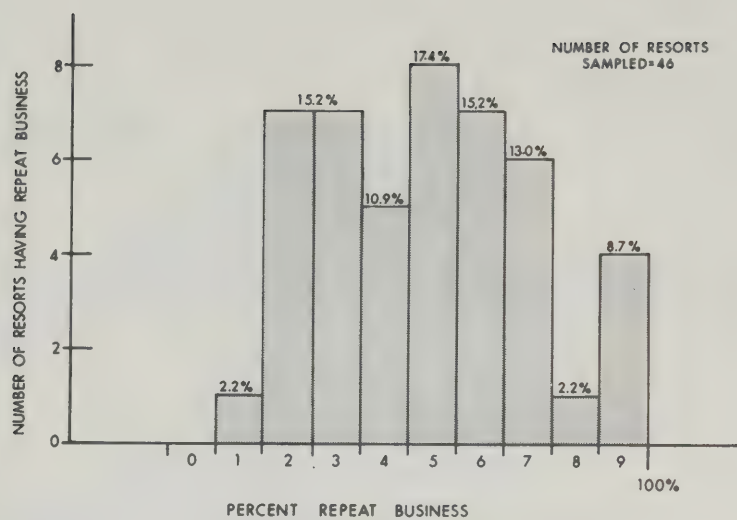
FIGURE 14, REPEAT BUSINESS, PENINSULAR ONTARIO
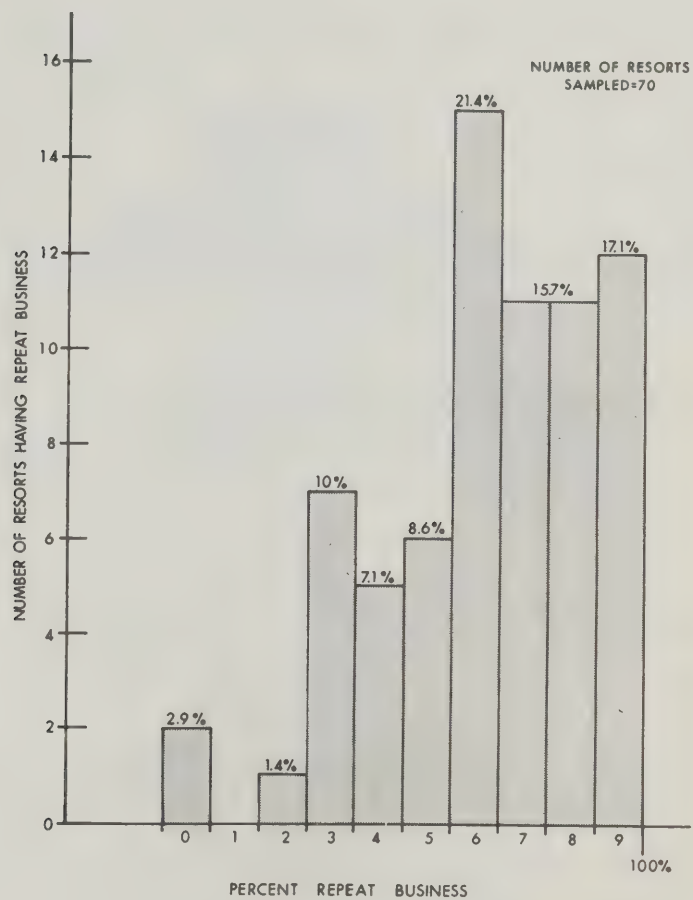
FIGURE 15, REPEAT BUSINESS, PRE-CAMBRIAN SHIELD
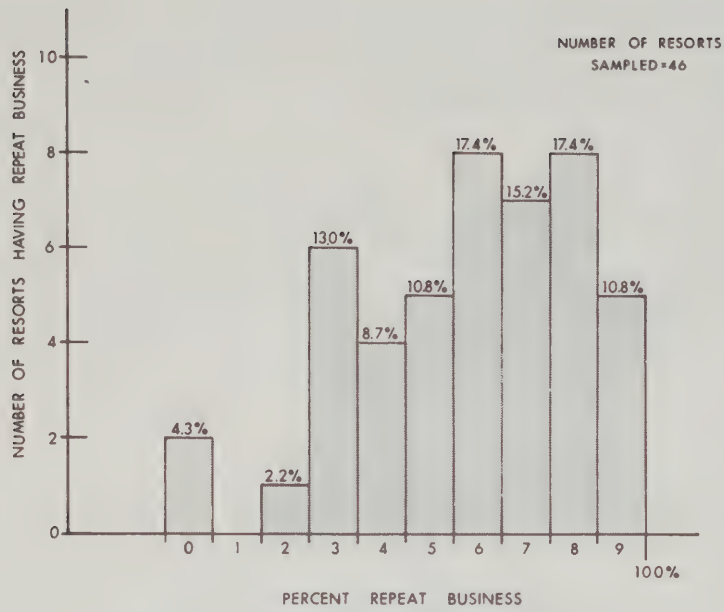
FIGURE 16, REPEAT BUSINESS, DIVISION II
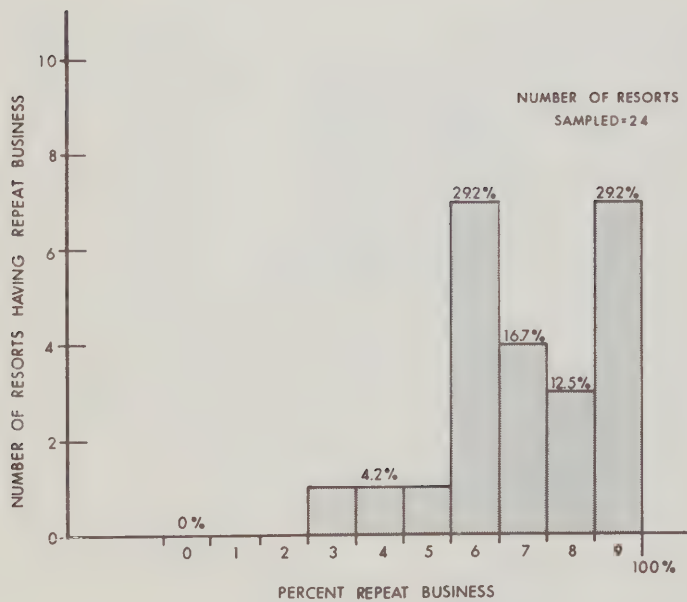
FIGURE 17, REPEAT BUSINESS, DIVISION III

37
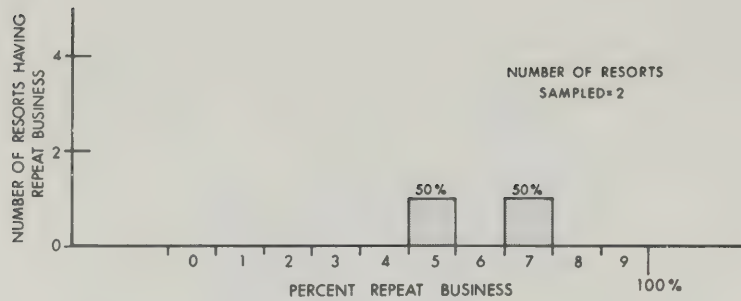
FIGURE 18, REPEAT BUSINESS, DIVISION IV
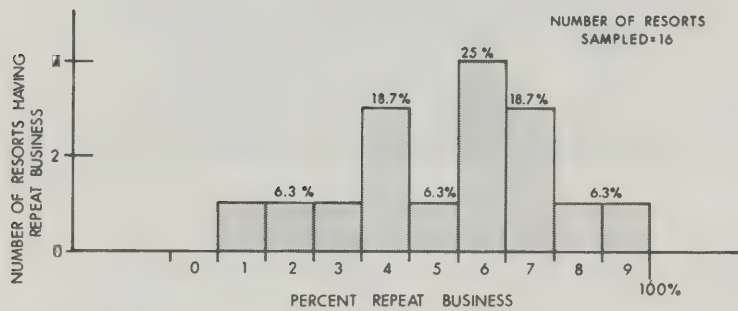
FIGURE 19, REPEAT BUSINESS, DIVISION V
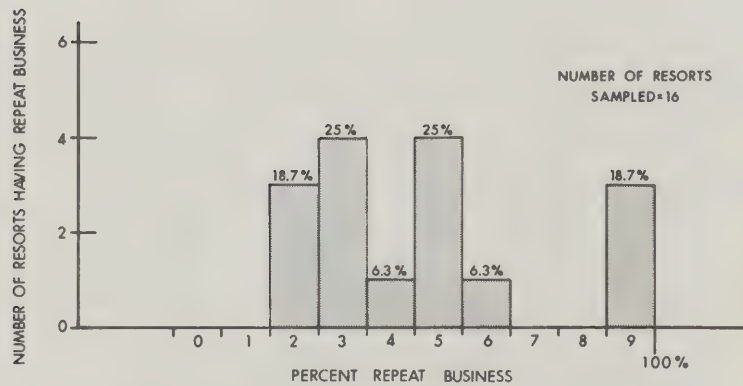
FIGURE 20, REPEAT BUSINESS, DIVISION VII
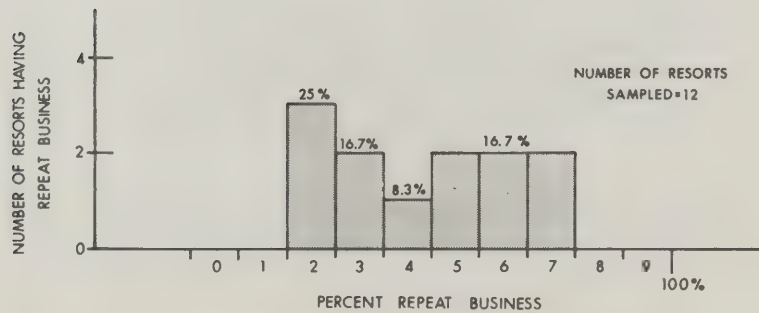
FIGURE 21, REPEAT BUSINESS, DIVISION VIII

38

The primary observation derived from these graphs is the fact that the success of a resort owner's season is dependent largely on the volume of business he receives during the four weeks from mid-July to mid-August. Any means of extending the season and reducing the severe peaking would be of benefit to the operators and ease, to some degree, the traffic loads during this period.

Percent Repeat Business. The impulse factor is borne out by statistics that show a lower percent of repeat business in Peninsular Ontario. (Refer to Figures 14 to 21.) Twenty-one percent of resorts in the Shield reported 60 to 90 percent of clientele were repeats with the next 33 percent reporting repeats of from 80 to 100 percent. In the south, the largest group (17.4 percent) reported 50 to 59 percent repeats; with the next 30 percent of resorts split evenly between 20 to 29 percent repeats and 60 to 69 percent repeats.

In the Shield, Division II shows a more evenly distributed range of repeat business levels than does Division III. The latter, however, has a more enthusiastic clientele at two levels, 60 to 69 percent and 90 to 100 percent. It may be that the less commercialized environment of Eastern Ontario has a very great attraction for a more limited group of patrons. One may speculate that on this basis, the potential for development in Division III is considerably greater than in Division II.

In Peninsular Ontario, the repeat business is generally lower. In this zone, the highest level (25 percent of resorts in the 60 to 69 percent range) is again in the Kawartha Lakes area.

Guest Trip Lengths. An anomoly occurs in the trips of the highest category. (Refer to Figures 22 to 29.) In the Pre-Cambrian, 28.6 percent resorts reported the most important origin zones were between 150 to 200 miles distant. In Peninsular Ontario, 32.6 percent reported the most important were from 200 to 300 miles distant. This may be explained by the impulse stops of tourists from the United States or out-of-province Canadians, more often first time trippers to the Province who are not aware of more remote facilities. A more intuitive result emerges upon examining the second and third categories of trip length in each area. In the Pre-Cambrian these two categories lumped together represented 48.6 percent of resorts reporting trip lengths of from 200 to 500 miles, while in Peninsular Ontario the next 47.8 percent of resorts indicated that trips of 100 to 200 miles were most common. Those results emphasize the fact that in the over-all picture, the Pre-Cambrian sector draws from a wider origin zone and caters to a more stable clientele. The Peninsular Ontario sector is receiving a larger proportion of the 'new wave' of vacationers, apparently from a some-what lower socio-economic bracket that formerly were not automobile trip vacationers. The largest element in this group come from Ontario's Mississauga Conurbation, but this influence is rapidly extending to include the Urban centres of the United States adjacent to the Great Lakes and the Canadian Border.

Division II draws its clientele largely from the Metropolitan Toronto area, hence trips are characteristically in the 150 to 200 mile range. The 300 to 500 mile trip reflects a large proportion of Americans from the Great Lakes states, especially Ohio. In looking at these figures,it must be remembered that they are averages over an area that itself extends about 125 miles from north to south. Undoubtedly, the high volume of relatively short trips from Toronto to the southern portion of the region tends to obscure the fewer long trips to resorts further north.
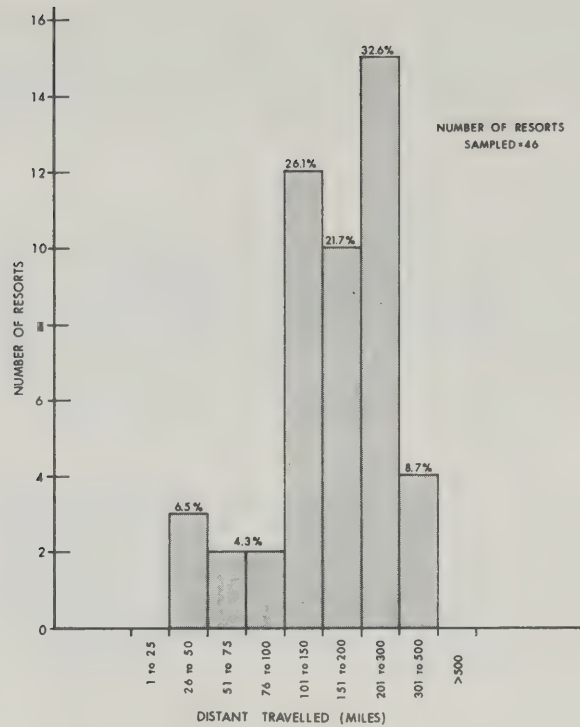
FIGURE 22, DISTANCE TRAVELLED (MILES), PENINSULAR ONTARIO
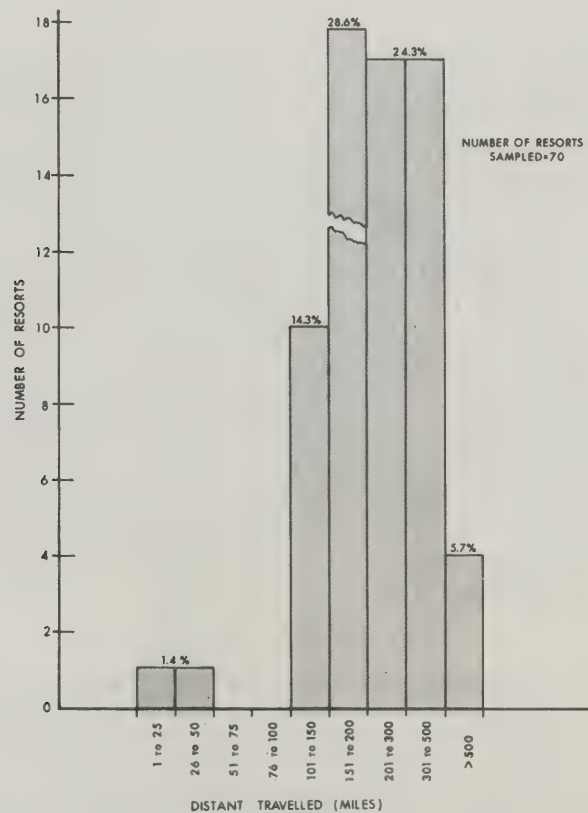
FIGURE 23, DISTANCE TRAVELLED (MILES), PRE-CAMBRIAN SHIELD
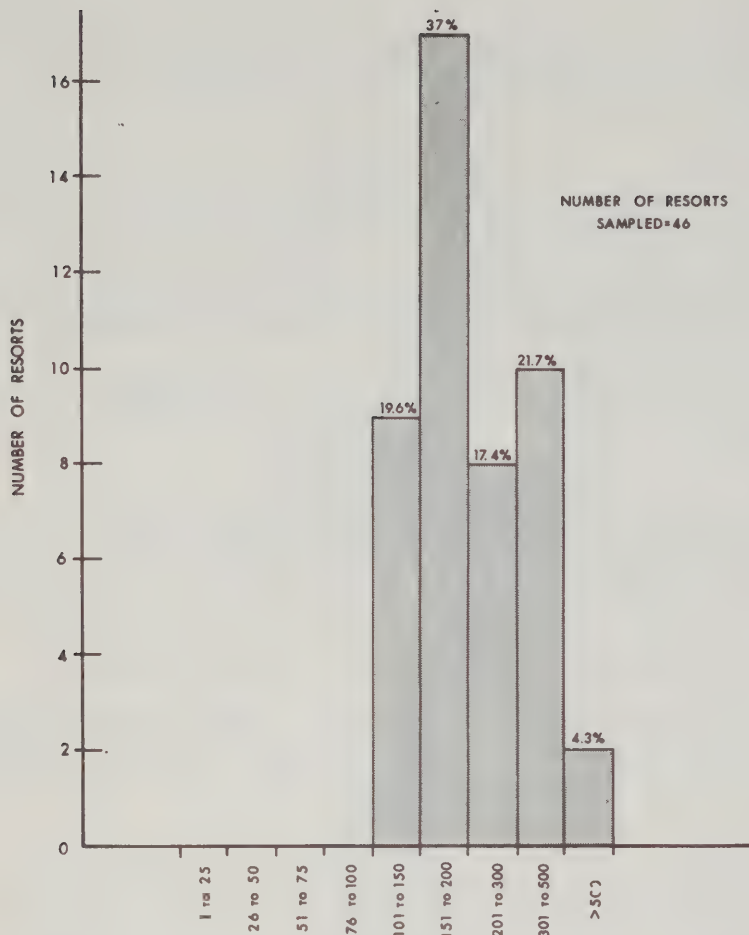
FIGURE 24, DISTANCE TRAVELLED (MILES), DIVISION II
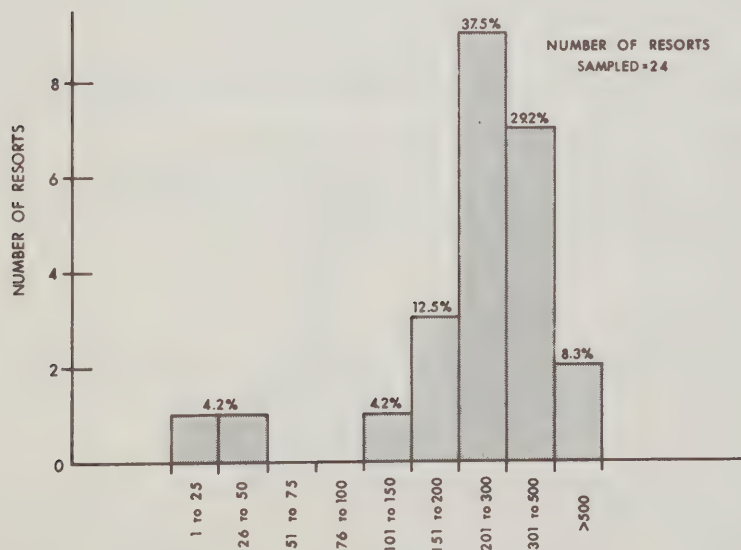
FIGURE 25, DISTANCE TRAVELLED (MILES), DIVISION III

41
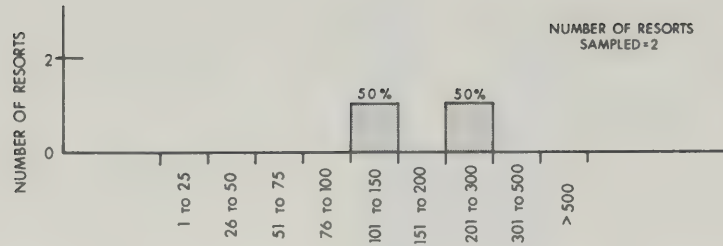
FIGURE 26, DISTANCE TRAVELLED (MILES), DIVISION IV
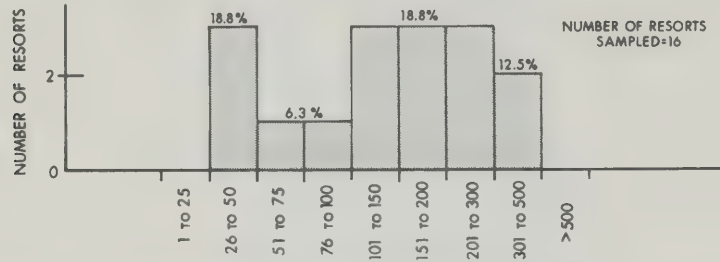
FIGURE 27, DISTANCE TRAVELLED (MILES), DIVISION V
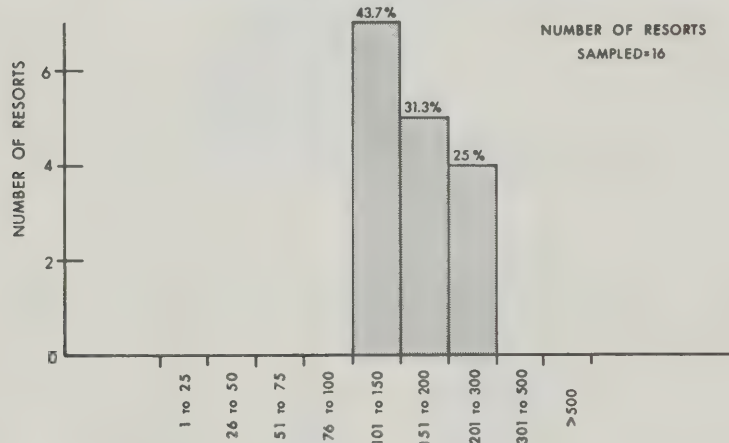
FIGURE 28, DISTANCE TRAVELLED (MILES), DIVISION VII
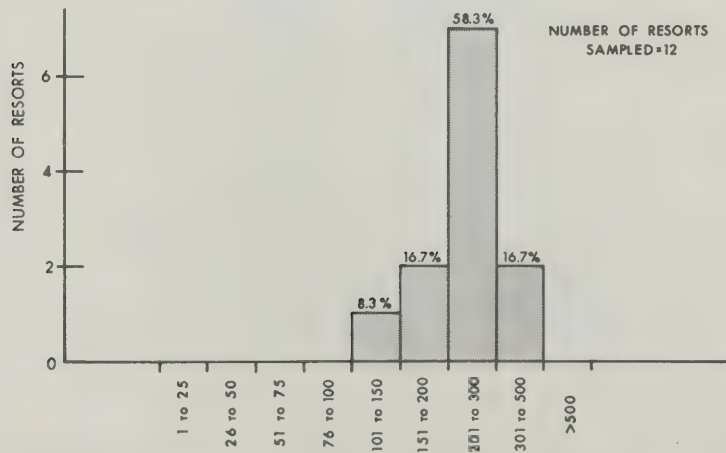
FIGURE 29, DISTANCE TRAVELLED (MILES), DIVISION VIII

Division III shows a longer modal trip length which may be attributed to the greater distance from Toronto as well as from the significant origin zones in New York State.

In Division V, the short trip less than 26 to 50 miles is due to the high proportion of local residents (especially Peterborough) who make use of the resorts. This is a striking exception to the general rule that people are not apt to spend vacations that close to home. The unique character of Peterborough residents may be that many who have the choice, are attracted to the city mainly because of the proximity to the Kawartha Lakes and their recreational potential. The relatively even distribution of trip lengths from 100 to 500 miles reflects the growing attractiveness of this division for visitors from widely separated origin zones.

Division VII attracts primarily from Toronto area (100 to 150 miles) with a general decline to a maximum of 300 miles. The nature of the Southern Georgian Bay area is such that tourists who would be attracted by its attributes may find similar types of areas closer to home, thus there is a relatively small out-of-province trade.

Again, the Bruce Peninsula, because of its distance from major urban centres displays a modal trip of 200 to 300 miles. This takes in both Toronto and Detroit, 151 to 200 includes London, while 300 to 500 miles takes in most of Michigan and Ohio.

Cluster Analysis of Accommodation Type (by Resort Area). The series of four scatter-grams, plot number of accommodations by type against Total Seasonal Use (T.S.U.) for the resorts sampled in any area. T.S.U. is constant for each area, so the positions of resort areas remains constant on the vertical scale. All variation therefore occurs on the horizontal scale.

Intuitively, several forms of information should be forthcoming from the study of these diagrams:

(a) The comparative rates of turnover (or lengths of stay) in differing accommodation types.
(b) Insofar as accommodation type is somewhat related to the age and class of resorts, an indicator of general clientele attraction.
(c) For areas where the plot is highly non-conforming with the usual pattern, a means of focusing on the reason for this variation.

It is felt that there might be a rather clear distinction between resort areas in the Shield and in Peninsular Ontario. This is not the case, since the intra-area variation in this case (as in others) is as great as the inter-area variations.

Rooms. With the exception of resort areas 13 and 14, the locus of points is in a steeply sloping positive curve indicating a relatively constant ratio between the two variables. (Refer to Figure 30.) The Muskoka and Lake of Bays areas (13 and 14) exhibit an

extremely high incidence of room type accommodation which is accounted for by the presence of several large, well-known and long-established resorts that were built in an era when resorting was an almost exclusive prerogative of the highest socio-economic class. These places are really hotels in their original form. This is, therefore, a reflection of the early predominence of Shield areas closest to Toronto. The rate of guest turnover in the resort hotels is above average, a characteristic of more recent origin. For this reason, it may be stated that the resort hotels generate a volume of traffic in excess of that which would be expected for their accommodation size.

At the other end of the scale, Areas 11, 12, 17, 20, 25 and 35 have a negligible amount of room-type accommodation. With the exception of Area 25 (Lake Scugog) all of these are on the periphery of recent recreational development. In the median group, there is the more normal distribution of rooms revealing a gradual rate of growth.

Cabins. Cabins at resorts represent the second stage in the growth of American Plan accommodation and continue to be the most common feature of this resort type. There are three groupings of areas with respect to cabins. (Refer to Figure 31.)

The first of these groups is negligible occurrence and this is the case in Areas 11, 20 and 35. All show a lack of American Plan resorts, in favour of Housekeeping type, although in the last area several American Plan resorts were seen but not sampled. Area 20 is somewhat biased in that it reflects mainly the rather recent development in Prince Edward County.

The second is low occurrence and in this group Areas 22, 23, 25 and 33 exhibit a low incidence of American Plan resorts, which implies the later resort growth in these lowland areas. Area 33 has a rather undesirable shoreline and has never attracted American Plan resorts. There is a higher than average turnover in these areas, reinforcing the theory that it is an area of above average impulse vacationing. Area 18 with its high total use fits somewhere between low and high occurrence. The Rideau Area (18) has a higher proportion of American Plan resorts than Land O'Lakes, however, except for density of development both are more like Areas 12 to 15 than 22 to 25.

The third group is high occurrence and the areas in this group (10, 12, 13, 14, 15, 17, 32 and 34) define the core and earlier penetrations of the resort industry in Ontario, and therefore show high rates of cabin accommodation in conjunction with the second stage of American Plan growth. Guest turnover is considerably lower.

Cottages (Housekeeping Units). The distribution of cottage type accommodation is more uniform over the study area. (Refer to Figure 32.) Only Area 12 (Parry Sound East) registers a negligible value in this category, which is due to predominance of American Plan fishing resorts. Otherwise, the only discernable difference is seen between areas of more constant or more recent growth where the ratio of cottages to total seasonal is high, as opposed to areas of earlier saturation (13, 18 and 23) or more static growth conditions in the industry (33).
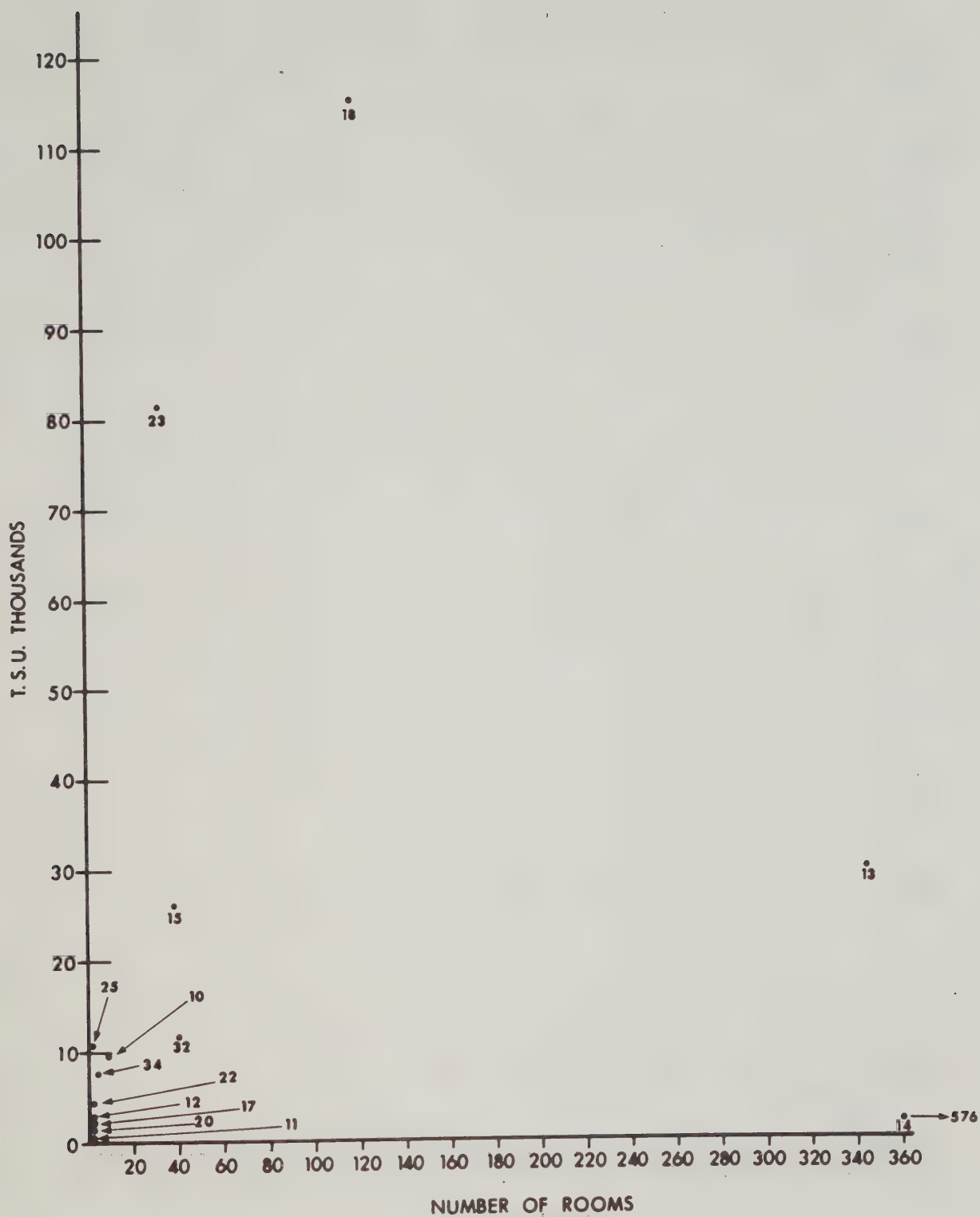
FIGURE 30, SCATTERGRAM: ACCOMMODATION TYPE
VERSUS TOTAL SEASONAL USE

FIGURE 31, SCATTERGRAM: CABINS VERSUS TOTAL SEASONAL USE
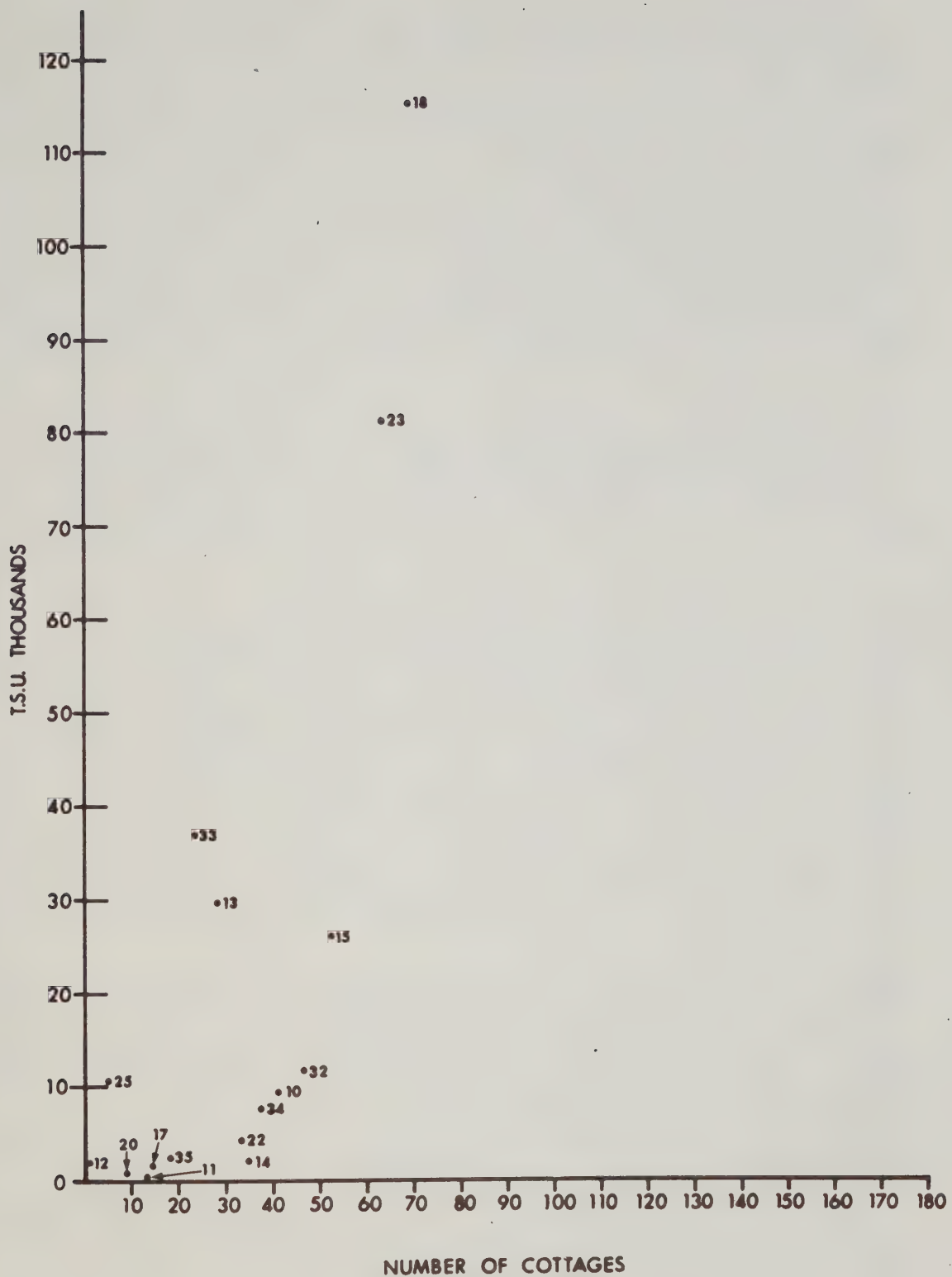
FIGURE 32, SCATTERGRAM: COTTAGES VERSUS TOTAL SEASONAL USE
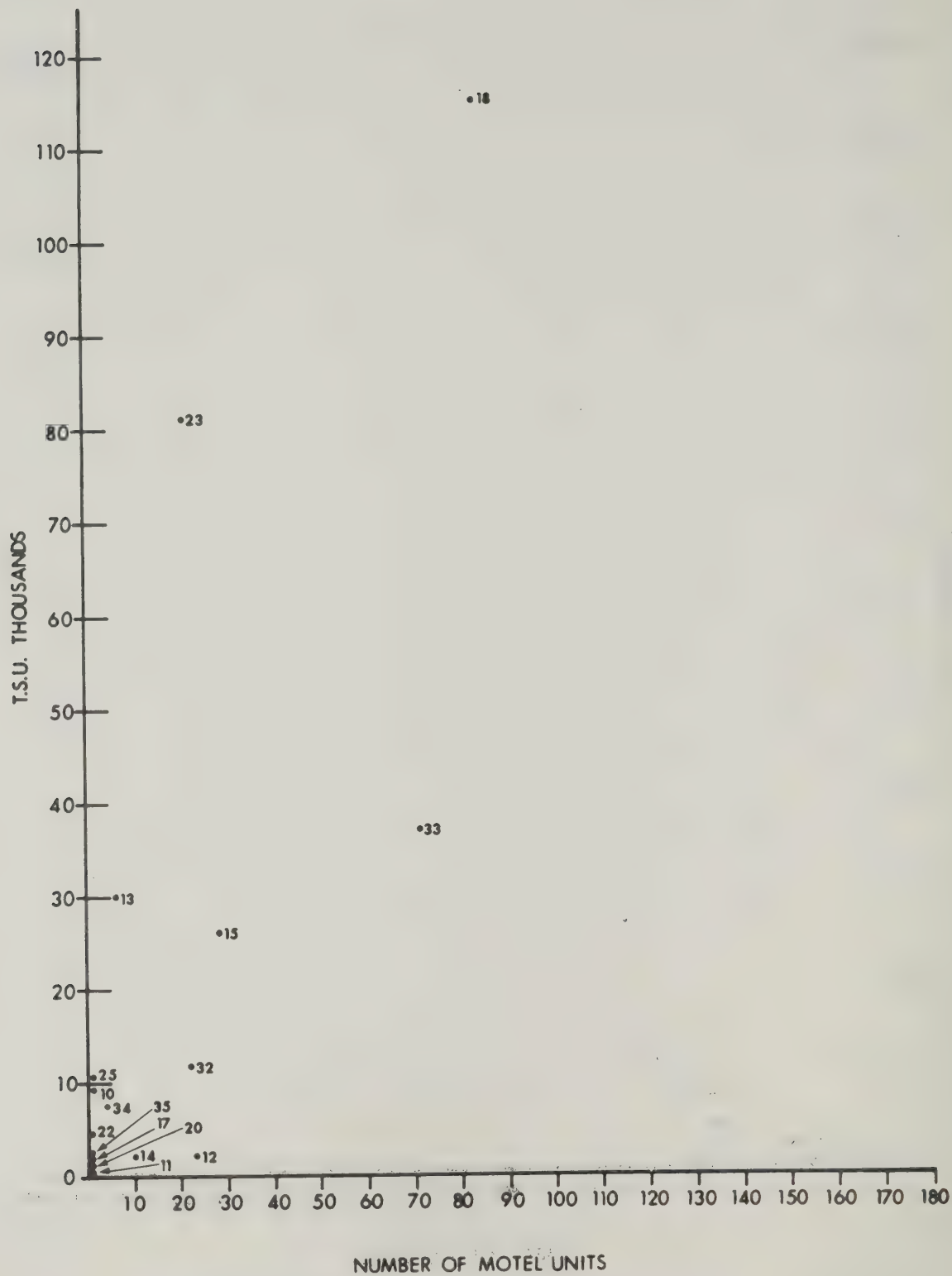
FIGURE 33, SCATTERGRAM: NUMBER OF MOTEL UNITS
VERSUS TOTAL SEASONAL USE

Motel Units. The innovation of motel type accommodation either as lodging units at American Plan or European Plan resorts (analogous to cabins) or as housekeeping units (analogous to cottages) is the most recent to affect the resort business. (Refer to Figure 33.) This is revealed by the fact that in seven of the sixteen areas sampled, there were no motel units found. They are, therefore, an important indicator of recent growth. Only two resort areas showed a high proportion of this accommodation type: Area 18, where it was primarily in the expanding resorts of the Land O'Lakes area, and in Area 33, where operators are looking not only to the summer season but also the the rapidly growing volume of winter recreationists attracted by the local ski industry. With these two peak seasons to rely upon, plus the demands for more substantially built winter accommodation, a number of recreationally oriented motels have appeared. The Bay Motor Hotel at Owen Sound offers unquestionably the most complete range of year-round recreational opportunities of any resort in the sample. Because it developed from a more traditional highway-oriented motel, its primary deficiency is its non-waterfront location.

In addition, Areas 12, 15, 23 and 32 have a significant amount of motel accommodation. Area 12 is at the fringe of Southern Ontario resort development and represents an absolute increase in the number of establishments. Areas 15 and 23 show mainly additions to existing resorts, although the northern portion of the Haliburton Area (15) has a large growth potential.

One of the most striking examples of a new motel type resort was found in Area 32 at Victoria Harbour. The Four Seasons Holiday Inn boasts an American Plan motel, on a waterfront location with marina, bar, swimming pool, sauna bath, entertainment and dancing nightly as well as other more common recreational facilities. This resort, with the Owen Sound example above, and the vacation suites, marina complexes and year-round lakeside sub-division developments on Lake Simcoe represent the most daring departures to be found in the Ontario resort industry to date. There is little doubt, however, that these isolated examples given the hint of what lies ahead to entice the resorting recreationist to Ontario. Those areas in which they prove successful, along with the as yet relatively under-developed areas in the northern and eastern parts of the study area will herald the growth points. As such, these growth points will, in turn, demand close scrutiny by highway planners if adequate access is to be provided, or maintained.

Cost - Distance Analysis. Because the cost factor did not appear significant in any of the foregoing analyses, an attempt was made to see if any relation existed between cost and distance travelled. The results are shown in Figure 34. The modal cost is 6 dollars with the upper limit being 16 dollars. The highest cost accommodation is taken only at the 200 to 300 mile trip, while on either side of this extreme, acceptable costs drop rather sharply to the 8 to 12 dollar range. It would appear that in general, the shortest trips are taken by those willing to pay not over 8 dollars per night. This is an absolute monetary limitation upon these people. Up to 400 miles, the cost of accommodation is a major proportion of the total cost of the trip, so one's trip budget is exposed to the highest cost accommodation within these limits. Beyond 400 miles, other trip costs begin to mount rapidly - gasoline, car maintenance, in-transit meals, incidentals, etc. so that in an effort to cover the greater total trip cost, lower rates of accommodation are sought in an effort to offset the other expenses.
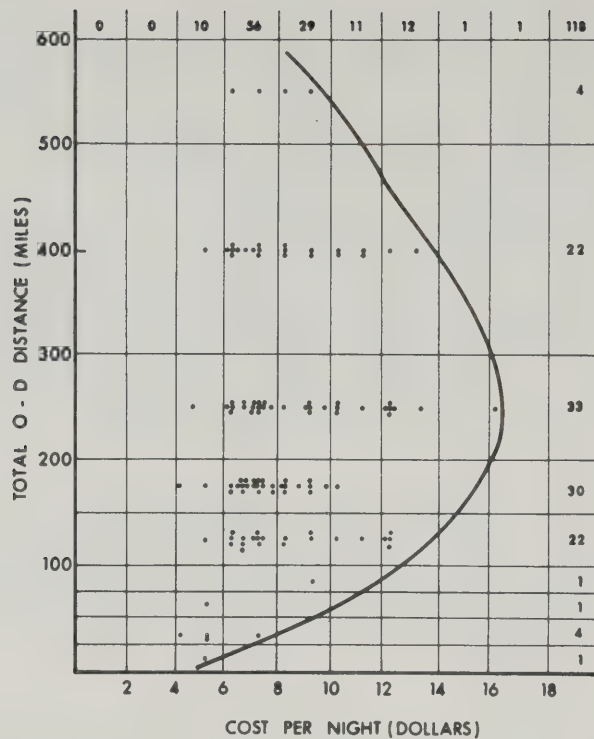
FIGURE 34, COST-DISTANCE ANALYSIS

CONCLUSION

In review, the aims of the foregoing study were two-fold:

(1) to interview an objective sample of resort owners in selected areas of Southern Ontario, the data to include information pertaining to site characteristics
(2) to undertake several types of statistical analyses of the collected data and assess their usefulness in studying this type of problem.

A sample included 120 resorts in resorts Areas 10, 11, 12, 13, 14, 15, 17, 18, 20, 22, 23, 25, 32, 33, 34 and 35. (Refer to Figure 1.) This was approximately a 3 percent stratified random sample in the selected areas.

The analysis phase of the study included processing of various portions of the data using four principal techniques:

(1) a percentage frequency of occurrence which was both descriptive and graphic
(2) chi-squared analysis

(3) factor analysis

(4) factor score analysis and mapping of factor scores.

In addition, a number of multiple-regression analyses were attempted, the results of which did not prove useful and therefore are not reported herein.

Percentage Frequency of Occurrence Analysis

This was a simple mechanical analysis of the data comparing each Recreation Division with the totals of the Pre-Cambrian Shield, Peninsular Ontario and the total study area. Although the technique was straightforward, the results did serve to show clearly the comparative position of the divisions with respect to different variables. For a larger sample, this technique could easily be carried out by electronic computing, and is likewise one which could be expanded to make use of some form of 'pattern analysis'. The latter technique, it is felt, holds considerable potential for the research of essentially non-quantifiable data.

Chi-Sqared Analysis

This technique was admirably suited to the problem in question since it requires no assumptions concerning the shape of the population frequency distribution. The chi-squared value indicates whether the observed frequencies of a given phenomenon differ significantly form the frequencies which might be expected on a random basis.

127 pairs of variables were tested in N x M contingency tables. Of these, 4 sets were significant above the .01 level, two above the .02 level, one above the .05 level and 6 above the .1 level. In total, 13 pairs of variables were significant above the .1 level.

The results of the chi-squared analysis indicate that resort type, resort morphology, age of clientele, foreshore characteristics and resort development were the most significant elements in assessing the attractiveness of a resort. These variables were the principal ones exhibiting levels of significance higher than would be expected.

Factor Analysis

The factor analysis extracted 20 principal factors; however, over 50 percent of the variance was explained by the first three and over 75 percent by the first seven.

An attempt was made to analyze the first ten factors and on the basis of the factor loadings above .5 they were designated as follows:

Factor 1 - relative development of a diversified resort industry
Factor 2 - resort nucleation
Factor 3 - recent prestige resort development
Factor 4 - impulse accessibility
Factor 5 - extended trip
Factor 6 - non-water-oriented site
Factor 7 - new elements in resort clientele linked with rising disposable income
Factor 8 - travel comfort
Factor 9 - availability of boats
Factor 10 - road width

In a future study, it is suggested that a questionnaire designed to rate these ten variables would provide a significant data base with which to estimate the attractive power of a given resort area.

Factor Scores

The four principal factors were mapped on the basis of factor scores for each unit in the sample of resort areas.

In Factor 1, the core areas of the Southern Ontario resort industry scored highest - Rideau, Muskoka and Lake of Bays. Particularly low in diversification were Eastern Ontario (Kingston to Brockville on the St. Lawrence) Lake Scugog, Mid-Lake Huron and Parry Sound East. This does not necessarily indicate an inferior class of resorts but rather a lack of diversification in the class or type of accommodation. The great majority of the study area exhibited scores within one standard deviation of the norm.

Factor 2 - resort nucleation was shown to be highest in the south-eastern portion of Georgian Bay with the norm exhibited in all of the older resort areas and a below average degree of nucleation in the more northerly, still developing resort areas. As pointed out earlier, the score in Area 35 may be somewhat unreliable due to the regional bias in the sample.

Factor 3 - recent prestige or high class resort development has been centred in the more northerly portion of the old resort area of Muskoka. This reflects primarily its upgrading of existing establishments while much of the development in Area 10 is new. There has been considerable development in Areas 23 and 25 but this has been of a less expensive type catering more to the new wave of recreationists. An almost complete lack of new development in Area 18 accounts for its low score.

Factor 4 - the impulse accessibility factor is highest in Area 23 which, as indicated in Factor 3 above, is catering to new populations primarily from the Metro-Toronto Region. At the other end of the scale, the Bruce Peninsula suffers from distance and no arterial highway and fails to attract the impulse tripper. The rest of the study area remains within the normal range.

The maps of factor scores indicate in brief those areas in which the Department of Highways may expect increased traffic due to these factors. In general, on Factor 1, low scores suggest greatest potential growth as do low scores on Factor 2, while high scores on Factors 3 and 4 indicate greater growth potential. Resort areas fitting in these categories might be looked upon as potential 'growth poles'.

REFERENCES

1.   Wolfe, R.I., 'Recreational Lands of Southern Ontario', unpublished Ph.D. Thesis, University of Toronto, 1948.

2.   Cattell, R.B., 'Factor Analysis', Harper, New York, 1952, p. 22.

3.   Harmon, H., 'Modern Factor Analysis', University of Chicago Press, 1961, p. 154 ff.

4.   Outdoor Recreation Resources Review Commission, Study Report 19, 'National Recreational Survey', U.S. Government Printing Office, Washington, D.C., 1961.

5.   Berry, B.J.L., Thoman, R.S. and Wood, W.D., 'Areas of Economic Stress in Canada', Queen's University, Kingston, Ontario, 1965.

APPENDIX 1, RECREATIONAL TRAVEL STUDY, CLASSIFICATION FORM

Commercial Establishment _____

Cottage _____

Owner _____

Name _____

Number C-1 R-1 etc. _____

Date of Survey _____

Location _____

Recreational Region _____

I. SITE CLASSIFICATION

A. Body of Water
1. _____ small lake (less than 2 miles)
2. _____ large lake
3. _____ Great Lakes Shore
4. _____ enlarged river area
5. _____ river
6. _____ not on water
7. _____ round
8. _____ linear
9. _____ islands
10. _____ no islands

C. Shore Site
1. _____ headland
2. _____ bay head
3. _____ sheltered shore
4. _____ exposed shore

E. Back Shore
1. _____ shelving (low)
2. _____ low bank (intermediate)
3. _____ high bank (steep)
4. _____ cliff
5. _____
6. _____ level *(Site Topography)*
7. _____ rolling *(Site Topography)*

G. Vegetation
1. _____ coniferous - thick
2. _____ coniferous - cleared
3. _____ deciduous - thick
4. _____ deciduous - cleared
5. _____ mixed coniferous and deciduous
6. _____ second growth bush
7. _____ parkland
8. _____ grass
9. _____ agricultural land

B. Accessibility
1. _____ isolated lake
2. _____ lake chain
3. _____ .
4. _____ indented shoreline
5. _____ straight shoreline

D. Foreshore
1. _____ sand beach (narrow)
2. _____ sand beach (wide)
3. _____ gravel beach
4. _____ cobble beach
5. _____ rocky shore
6. _____ marshy shore
7. _____ combination
8. _____ shelving
9. _____ precipitous
10. _____ weeds/reeds/stumps

F. Regolith
1. _____ till
2. _____ sand
3. _____ rocky
4. _____ bedrock cutcropping

Adjacent Drainage
5. _____ good
6. _____ fair (swamp pockets)
7. _____ poor (swamp)
8. _____ aspect
9. _____ length of reach in front of lodge/cottage

H. Aesthetic Appeal
1. _____ high
2. _____ average
3. _____ low

III. FUNCTIONAL CLASSIFICATION (R)

A.   1. Resort _____   2. Cottage _____

C. Activity (most important to guest)

1. _____ relaxation
2. _____ socializing
3. _____ group activity
4. _____ individual sports
5. _____ water sports
6. _____ family outing
7. _____ sightseeing
8. _____ hiking
9. _____ nature study
10. _____

B. Stage of Life - Appeals to:

1. _____ young unmarried
2. _____ young married without family
3. _____ young married with young family (to age 10)
4. _____ married with family (10 to 18)
5. _____ older couple without family
6. _____ elderly
7. _____ groups of families
8. _____ fishermen/hunters
9. _____ trends _____

D. Socio-Economic Class

1. _____ professional class
2. _____ white collar
3. _____ blue collar
4. _____ labourer
5. _____ trends _____

E. Vacation

1. _____ weekend
2. _____ 1 week
3. _____ 2 weeks
4. _____ longer (specify)
5. _____ trends _____

F. Major Activities (available)

1. _____ water sports
2. _____ fishing
3. _____ organized sports
4. _____ individual sports
5. _____ sightseeing
6. _____ group activity
7. _____ relaxation
8. _____ instruction
9. _____ hiking
10. _____ nature study
11. _____ trends _____

G. Average Distance Travelled by Guests
(from most important point of origin)

Trends longer   1 _____
shorter 2   _____

H. Predominant Area of Origin of Guests

Trends: _____

I. How much land do you own? _____
J. Land available for expansion _____
K. Peak Period _____

L. Recent Additions

New Buildings	Renovations
1. _____ yes	1. _____ yes
2. _____ no	2. _____ no
3. why?_____	3. why?_____
4. what_____	4. what _____

M. Planned Additions

New Buildings	Renovations
1. _____ yes	1. _____ yes
2. _____ no	2. _____ no
3. why? _____	3. why? _____
4. what _____	4. what _____

N. Ratio Inq./Accd'n. _____

IV. MORPHOLOGICAL CLASSIFICATION (R)

A. Layout of Buildings

1. _____ total
2. _____ circular
3. _____ semi-circular
4. _____ linear
5. _____ irregular
6. _____ in trees
7. _____ in open

B.

1. _____ main bldg. with rooms   2. _____
3. _____ main bldg. without rooms   4. _____
5. _____ other bldgs. with rooms   6. _____
7. _____ multiple cabins   8. _____
9. _____ individual cabins   10. _____

C. Appearance

1. _____ open
2. _____ crowded
3. _____
4. _____ rustic
5. _____ traditional
6. _____ modern
7. _____ attractive
8. _____ average
9. _____ run down

D. Facilities to be Added

1. _____

2. _____

3. _____

4. _____

E. Facilities

1. _____ pool   11. _____
2. _____ dock   12. _____
3. _____ float   13. _____
4. _____ boat ramp   14. _____ gift shop
5. _____ boats/canoes for rent   15. _____ snack bar
6. _____ sports field   16. _____ "bar"
7. _____ tennis courts   17. _____ rec'n. room
8. _____ shuffleboard   18. _____
9. _____ divingboard/slide   19. _____
10. _____ roped-off swimming area 20. _____

V. COTTAGE AREA:

A. Total Number in Area

B. Density

1. _____ isolated
2. _____ lots 50 to 100 ft. - no streets
3. _____ lots less than 50 ft. - no streets
4. _____ 50 to 100 ft. street pattern
5. _____ less than 50 ft. street pattern
6. _____
7. _____

C. Sale Value

1. _____ greater than $50,000
2. _____ greater than $15,000   3. _____ %
3. _____ $10 - 15,000   5. _____ %
6. _____ $5 - 10,000   7. _____ %
8. _____ $3 - 5,000   9. _____ %
10. _____ less than $3,000   11. _____ %

D. Conveniences

Hydro 1. _____ yes 2. _____ no 3. _____ %
Sewer 4. _____ yes 5. _____ no 6. _____ %   7. Septic 8. _____ %
Water 11. _____ yes 12. _____ no 13. _____ %   9. Outdoor 10. _____ %

E. Waterfront

Private	1. ____ yes	2. ____ no
Dock	3. ____ yes	4. ____ no
Boathouse	5. ____ yes	6. ____ no
Public Beach Within	7. ____ 5 min.	
	8. ____ 10 min.	
	9. ____ 15 min.	
	10. ____ more than 15 min.	

11. ____ % with private beach
12. ____ % with public beach
13. ____ swimming pools

F.

1. ____ % owner-occupied
2. ____ % rented

G. Age (average)

1. ____ less than 5 years ____ %
2. ____ 5 - 10 ____ %
3. ____ 10 - 15 ____ %
4. ____ greater than 15 ____ %

H.

1. Available land for expansion.
   (a) for cottages: waterfront _____
                   back lots _____
   (b) commercial establishments _____
   (c) subdivisions _____

APPENDIX 2, PERCENTAGE OF OCCURRENCE OF
VARIANCE BY RECREATION DIVISION

      The following tables summarize data (by recreation division) collected in the R.T.S. (Resort) Classification.

      Percentages are based on the following totals (100 percent) of resorts in each sample area:

Total Study Area (Total)	116
Pre-Cambrian Southern Ontario (PC)	70
Peninsular Southern Ontario (PO)	46
Recreation Division II	46
III	24
IV	2
V	16
VI	16
VII	12

The Total = the aggregate of all Recreation Divisions sampled.
PC   = the aggregate of Recreation Divisions II and III.
PO   = the aggregate of Recreation Divisions IV, V, VI and VII.

The majority of the tables appear in three columns.

      The 1st column is the name of the sample area.
      The 2nd column is the number of resorts exhibiting the variable (or characteristic) in question.
      The 3rd column is the percentage of total resorts in the sample area exhibiting the variable (or characteristic) in question.

      Variables appearing in this form are Nos. 1 - 41, 43 - 47, 57 - 67, 69 - 86, 89 - 104, 110, 112, 113 and 123.

Variable 42	- is a simple average distance from the resorts in the given sample area to the nearest town designated as the place to which guests and owners travel for retail goods and services.
Variables 49 - 56	- relate to criticism of local roads. Primary and secondary criticisms are listed for each variable in each sample area.
Variable 68	- is the first of a number of variables in which the frequency of occurrence is designated in rank order. In this case the facilities in the nearest town are listed in rank order by frequency of occurrence for each sample area.
Variable 87	- indicates, primary, secondary and tertiary trends toward new groupings of clientele for each sample area.
Variable 88	- lists those activities most important to guests in rank order for each sample area.

Variables 89 - 95   -   designate the primary socio-economic class of clientele at each resort in the sample area. It will be noted that two totals appear for each variable. The 'total' at the top of each list indicates those resorts where the socio-economic class in question was combined with another class of importance but lesser proportion.

The 'total' at the end of each list indicates those resorts where the socio-economic class in question was the only significant grouping. It will be noted that this figure represents the total of recreation divisions under this heading.

Under each variable is shown a 'trend'. This is the trend toward the socio-economic class at resorts in the sampled area.

(Variable 96 omitted)

Variables 97 - 104   -   indicate vacation lengths and for each variable the trends to this vacation length are shown.

Variable 105   -   indicates trends towards vacation lengths over the total study area.

Variable 106   -   Activities available at resorts are displayed in rank order by sample areas. Activity numbers refer to the legend at the top of the lists.

Variable 107   -   the legend for Trends in Activities corresponds to that in variable 106, with the addition of skiing.

Variable 108   -   shows distance travelled (one-way trip-length) trends, only in terms of an increase, decrease or no trend.

Variables 110 - 126   -   deal with actual or planned additions or alterations to resort facilities, the reasons that operators gave for their being undertaken.

Variables 111, 116, 120 & 124   -   deal with the types of facilities recently added or renovated, and planned for addition or renovation. Types of additions and renovations correspond in all of the above and are displayed in rank order.

Variables 112, 113, 117, 121 & 125   -   list reasons in rank order, for a negative response to variables 11, 116, 121 & 124. Response classes correspond in all cases.

Variables 114, 118, 122 & 126   -   list reasons in rank order, for a negative response to variables 11, 116, 121 & 124. Response classes correspond in all cases.

Variable 127   -   lists in rank order, facilities installed at resorts in each sample area. Facility numbers refer to the legend at the top.

In certain cases, due to multiple responses or no response, numbers do not aggregate to the total resorts in a sample area nor do percentages aggregate to 100.

APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd)

1 American Plan

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	31	26.6
II	19	41.4
III	7	29.2
IV	0	0
V	1	6.25
VII	2	12.5
VIII	2	16.7
PC	26	37.1
PO	5	10.9

2 American Plan and Housekeeping

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	16	13.8
II	5	10.9
III	6	25.0
IV	0	0
V	3	18.8
VII	0	0
VIII	2	16.7
PC	11	15.7
PO	5	10.9

3 Housekeeping

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	41	35.3
II	14	30.4
III	8	33.3
IV	2	100.0
V	4	25.0
VII	6	38.6
VIII	7	58.4
PC	22	31.4
PO	19	41.4

4 Lodging and Housekeeping

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	22	19.0
II	7	4.4
III	1	4.2
IV	0	0
V	8	50.0
VII	5	32.2
VIII	1	8.4
PC	8	11.4
PO	14	30.4

5 European Plan

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	4	3.4
II	1	2.2
III	0	0
IV	0	0
V	0	0
VII	3	18.8
VIII	0	0
PC	1	1.43
PO	3	6.6

6 American Plan and European Plan

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	2	1.7
II	0	0
III	2	8.4
IV	0	0
V	0	0
VII	0	0
VIII	0	0
PC	2	2.8
PO	0	0

7 Small Lake

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	17	14.6
II	12	26.1
III	2	8.4
IV	0	0
V	2	12.5
VII	0	0
VIII	1	8.4
PC	14	20.0
PO	3	6.6

8 Large Lake

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	55	47.4
II	26	56.5
III	19	79.2
IV	0	0
V	9	56.4
VII	0	0
VIII	1	8.4
PC	45	64.2
PO	10	21.8

9 Great Lakes Shore

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	20	17.3
II	3	6.6
III	0	0
IV	2	100.0
V	0	0
VII	8	50.0
VIII	7	58.4
PC	3	3.2
PO	17	37.0

10 Enlarged Portion of River

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	7	6.0
II	3	6.6
III	2	8.4
IV	0	0
V	2	12.5
VII	0	0
VIII	0	0
PC	5	6.1
PO	2	4.4

11 River

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	9	8.0
II	2	4.4
III	1	4.2
IV	0	0
V	2	12.5
VII	4	25.0
VIII	0	0
PC	3	4.2
PO	6	13.0

12 Not on Water

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	8	7.2
II	0	0
III	0	0
IV	0	0
V	1	6.2
VII	4	25.0
VIII	3	25.0
PC	0	0
PO	8	17.4

APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)

13 Lake Shape - Round

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	67	58.0
II	23	50.0
III	9	37.5
IV	2	100.0
V	8	50.0
VII	12	75.0
VIII	11	91.0
PC	34	48.6
PO	33	71.8

14 Lake Shape - Linear

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	49	42.2
II	23	50.0
III	15	62.5
IV	0	0
V	8	50.0
VII	3	18.8
VIII	0	0
PC	38	54.3
PO	11	24.0

15 Islands in Lake

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	66	57.0
II	30	65.2
III	16	66.6
IV	0	0
V	10	62.5
VII	3	18.8
VIII	5	41.6
PC	48	68.6
PO	18	39.2

16 Chain Lake

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	78	67.2
II	29	63.0
III	13	54.2
IV	2	100.0
V	11	68.8
VII	14	87.8
VIII	9	75.0
PC	42	60.0
PO	36	78.4

17 Isolated Lake

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	38	32.8
II	17	37.0
III	11	45.8
IV	0	0
V	5	32.2
VII	2	12.5
VIII	3	25.0
PC	28	40.0
PO	10	21.8

18 Straight Lake-Shore

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	54	46.6
II	16	34.8
III	9	37.5
IV	2	100.0
V	9	56.4
VII	12	75.0
VIII	6	38.6
PC	25	35.7
PO	29	63.0

19 Indented Lake-Shore

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	62	53.4
II	30	65.2
III	15	62.5
IV	0	0
V	7	43.8
VII	4	25.0
VIII	6	50.0
PC	45	64.2
PO	17	37.0

20 Bay-Head Shore-Site

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	58	50.0
II	27	58.7
III	15	62.5
IV	2	100.0
V	7	43.8
VII	2	12.5
VIII	5	41.6
PC	42	60.0
PO	16	34.8

21 Headland Shore-Site

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	14	12.1
II	5	10.9
III	3	12.5
IV	0	0
V	3	18.8
VII	2	12.5
VIII	1	8.4
PC	8	11.4
PO	6	13.0

22 Straight Shore-Site

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	44	37.9
II	14	30.4
III	6	25.0
IV	0	0
V	6	38.6
VII	12	75.0
VIII	6	50.0
PC	20	28.6
PO	24	52.2

23 Sheltered Shore-Site

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	53	45.6
II	29	63.0
III	7	29.2
IV	0	0
V	8	50.0
VII	5	32.2
VIII	4	33.3
PC	36	51.4
PO	17	37.0

24 Exposed

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	63	54.4
II	17	37.0
III	17	71.8
IV	2	100.0
V	8	50.0
VII	11	68.8
VIII	8	66.6
PC	34	48.6
PO	29	63.0

APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)

25 Sand Beach - Narrow

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	31	26.6
II	19	41.4
III	4	16.7
IV	0	0
V	5	32.2
VII	2	12.5
VIII	1	8.4
PC	23	32.6
PO	8	17.4

26 Sand Beach - Wide

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	28	24.1
II	7	15.2
III	5	20.8
IV	0	0
V	0	0
VII	11	68.8
VIII	5	41.6
PC	12	17.1
PO	16	34.8

27 Gravel Beach

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	9	7.9
II	2	4.4
III	2	8.4
IV	2	100.0
V	1	6.2
VII	0	0
VIII	2	16.7
PC	4	5.7
PO	5	10.9

28 Cobble Beach

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	7	5.9
II	3	6.6
III	1	4.2
IV	0	0
V	1	6.2
VII	1	6.2
VIII	1	8.4
PC	4	5.7
PO	3	6.6

29 Rocky Shore

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	36	31.0
II	12	26.1
III	12	50.0
IV	0	0
V	7	43.8
VII	2	12.5
VIII	3	25.0
PC	24	34.2
PO	12	26.1

30 Marsh Shore

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	5	4.3
II	3	6.6
III	0	0
IV	0	0
V	2	12.5
VII	0	0
VIII	0	0
PC	3	4.2
PO	2	4.4

31 Shelving Foreshore Slope

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	91	78.4
II	33	71.8
III	20	83.4
IV	2	100.0
V	13	81.3
VII	13	81.3
VIII	10	83.4
PC	53	75.7
PO	38	82.7

32 Precipitous Foreshore Slope

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	25	21.6
II	13	28.2
III	4	16.7
IV	0	0
V	3	18.7
VII	3	18.7
VIII	2	16.7
PC	17	24.2
PO	8	17.4

33 Weeds on Foreshore

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	45	38.7
No Weeds	71	61.3
II	31	66.5
III	11	45.8
IV	1	50.0
V	6	38.6
VII	12	43.8
VIII	10	83.4
PC	42	61.4
PO	29	63.0

34 Back Shore - Shelving

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	44	37.9
II	9	19.6
III	8	33.3
IV	2	100.0
V	9	56.4
VII	8	50.0
VIII	8	66.6
PC	17	24.3
PO	27	58.7

35 Back Shore - Low Bank

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	47	40.5
II	23	50.0
III	9	37.5
IV	0	0
V	5	32.2
VII	7	43.8
VIII	3	25.0
PC	32	45.7
PO	15	37.0

36 Back Shore - High Bank

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	23	19.9
II	13	28.3
III	7	29.2
IV	0	0
V	1	6.2
VII	1	6.2
VIII	1	8.4
PC	20	28.6
PO	3	6.6

APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)

37 Back Shore - Cliff

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	2	1.7
II	1	2.2
III	0	0
IV	0	0
V	1	6.25
VII	0	0
VIII	0	0
PC	1	1.43
PO	1	2.2

38 Site - Level

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	53	45.7
II	11	24.0
III	9	37.5
IV	2	100.0
V	7	43.8
VII	13	81.3
VIII	11	91.6
PC	20	28.6
PO	33	79.8

39 Site - Rolling

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	59	50.8
II	31	67.4
III	15	62.5
IV	0	0
V	9	56.4
VII	3	18.8
VIII	1	8.4
PC	46	65.7
PO	13	28.3

40 Site - Hilly

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	4	3.4
II	4	8.7
III	0	0
IV	0	0
V	0	0
VII	0	0
VIII	0	0
PC	4	5.7
PO	0	0

41 Distance to Town (Average)

RESORT AREAS	MILES
Total	8.4
II	9.6
III	14.1
IV	6.5
V	5.0
VII	2.8
VIII	6.4
PC	11.8
PO	5.0

42 Water Access Only

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	3	2.6
II	3	6.6
III	0	0
IV	0	0
V	0	0
VII	0	0
VIII	0	0
PC	3	4.2
PO	0	9

43 Owner - Local

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	40	34.5
II	14	30.4
III	10	41.7
IV	2	100.0
V	4	25.0
VII	5	32.2
VIII	5	41.6
PC	24	34.2
PO	16	34.8

44 Owner - Other Ontario

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	70	60.4
II	29	63.0
III	14	58.4
IV	0	0
V	12	75.0
VII	9	58.4
VIII	6	50.0
PC	43	61.4
PO	27	58.7

45 Owner - U.S.

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	6	5.1
II	3	6.6
III	0	0
IV	0	0
V	0	0
VII	2	12.5
VIII	1	8.4
PC	3	4.2
PO	3	6.6

46 Roads Adequate

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	48	41.4
II	22	47.8
III	7	68.2
IV	2	100.0
V	8	50.0
VII	5	31.2
VIII	4	33.4
PC	29	41.4
PO	19	41.3

47 Roads Not Adequate

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	68	58.6
II	24	52.2
III	17	71.8
IV	0	0
V	8	50.0
VII	11	68.8
VIII	8	66.6
PC	41	58.6
PO	27	58.7

APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)

2-11

49. Road Criticism - Surface

RESORT AREAS	CRITICISM	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
II	1st	13	28.3
	2nd	4	8.7
III	1st	6	25.0
	2nd	6	25.0
IV	1st	0	-
	2nd	0	-
V	1st	2	12.5
	2nd	0	0
VII	1st	2	12.5
	2nd	1	6.2
VIII	1st	5	41.6
	2nd	0	0
PC	1st	19	27.2
	2nd	10	14.3
PO	1st	9	19.6
	2nd	1	2.2
1st	Total	11	9.5
2nd	Total	28	24.1

50. Road Criticism - Width

RESORT AREAS	CRITICISM	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
II	1st	6	13.0
	2nd	3	6.6
III	1st	3	12.5
	2nd	1	4.2
IV	1st	0	-
	2nd	0	-
V	1st	0	-
	2nd	0	-
VII	1st	3	18.8
	2nd	0	0
VIII	1st	0	-
	2nd	0	-
PC	1st	9	12.8
	2nd	4	5.7
PO	1st	3	6.6
	2nd	0	0
1st	Total	4	3.4
2nd	Total	12	10.4

51. Road Criticism - Hills

RESORT AREAS	CRITICISM	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
II	1st	0	0
	2nd	2	4.4
III	1st	0	0
	2nd	1	4.2
IV	1st	0	-
	2nd	0	-
V	1st	0	-
	2nd	0	-
VII	1st	0	-
	2nd	0	-
VIII	1st	0	-
	2nd	0	-
PC	1st	0	0
	2nd	3	4.2
PO	1st	0	0
	2nd	0	0
1st	Total	3	2.6
2nd	Total	0	0

52. Road Criticism - Curves

RESORT AREAS	CRITICISM	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
II	1st	3	6.6
	2nd	4	8.7
III	1st	2	8.4
	2nd	0	0
IV	1st	0	-
	2nd	0	-
V	1st	0	-
	2nd	0	-
VII	1st	0	-
	2nd	0	-
VIII	1st	2	16.7
	2nd	2	16.7
PC	1st	5	7.1
	2nd	4	5.7
PO	1st	2	2.8
	2nd	2	2.8
1st	Total	6	5.2
2nd	Total	7	6.1

53. Road Criticism - Signs

RESORT AREAS	CRITICISM	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
II	1st	1	2.2
	2nd	1	2.2
III	1st	1	4.2
	2nd	1	4.2
IV	1st		0
	2nd		0
V	1st	2	12.5
	2nd	0	0
VII	1st	1	6.2
	2nd	0	0
VIII	1st	0	0
	2nd	2	16.7
PC	1st	2	2.8
	2nd	2	2.8
PO	1st	3	6.6
	2nd	2	4.4
1st	Total	4	3.4
2nd	Total	5	4.2

54. Road Criticism - O.K. After Construction

RESORT AREAS	CRITICISM	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
II	1st	1	2.2
	2nd	0	0
III	1st	4	16.7
	2nd	0	0
IV	1st	0	-
	2nd	0	-
V	1st	3	18.8
	2nd	0	0
VII	1st	1	6.2
	2nd	0	0
VIII	1st	1	8.4
	2nd	0	0
PC	1st	5	7.1
	2nd	0	0
PO	1st	5	15.2
	2nd	0	0
	Total	10	8.6

55. Road Criticism - Dust

RESORT AREAS	CRITICISM	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
II	1st	0	0
	2nd	4	8.7
III	1st	2	8.4
	2nd	2	8.4
IV	1st	-	0
	2nd	-	0
V	1st	-	0
	2nd	-	0
VII	1st	2	12.5
	2nd	0	0
VIII	1st	0	0
	2nd	3	25.0
PC	1st	2	2.8
	2nd	6	8.5
PO	1st	2	4.4
	2nd	3	6.6
1st	Total	4	3.4
2nd	Total	9	8.0

56. Road Criticism - Congestion

RESORT AREAS	CRITICISM	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
II	1st	0	0
	2nd	0	0
III	1st	0	0
	2nd	1	4.2
IV	1st	-	0
	2nd	-	0
V	1st	1	6.2
	2nd	0	0
VII	1st	2	12.5
	2nd	5	32.2
VIII	1st	0	0
	2nd	0	0
PC	1st	0	0
	2nd	1	2.8
PO	1st	3	6.6
	2nd	5	15.2
1st	Total	6	5.2
2nd	Total	3	2.6

APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)

57. Number of Cars (at establishment) Less than 100

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	32	27.6
II	13	28.3
III	4	16.7
IV	1	50.0
V	3	18.8
VII	5	32.2
VIII	6	50.0
PC	17	24.8
PO	15	32.6

58. Number of Cars (at establishment) 100 to 499

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	46	39.6
II	16	34.8
III	11	45.8
IV	1	50.0
V	7	32.2
VII	7	32.2
VIII	4	33.3
PC	27	38.5
PO	19	41.4

59. Number of Cars (at establishment) 500 to 999

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	15	12.9
II	7	15.2
III	2	8.4
IV	0	0
V	1	6.2
VII	3	18.8
VIII	2	16.7
PC	9	12.8
PO	6	13.0

60. Number of Cars (at establishment) 1,000 to 4,999

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	19	16.4
II	10	21.8
III	4	16.7
IV	0	0
V	4	25.0
VII	1	6.2
VIII	0	0
PC	14	20.0
PO	5	15.2

61. Number of Cars (at establishment) 5,000 to 9,999

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	2	1.7
II	0	0
III	2	8.4
IV	0	0
V	0	0
VII	0	0
VIII	0	0
PC	2	2.8
PO	0	0

62. Number of Cars (at establishment) More than 10,000

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	2	1.7
II	0	0
III	1	4.2
IV	0	0
V	1	6.2
VII	0	0
VIII	0	0
PC	1	1.4
PO	1	2.2

APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)

63. Number of Cars on Access Road 100 to 499 (A.A.D.T.)

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	16	13.8
II	7	15.2
III	3	12.5
IV	0	0
V	2	12.5
VII	3	18.8
VIII	1	8.4
PC	10	14.3
PO	6	13.0

64. Number of Cars on Access Road 500 to 999 (A.A.D.T.)

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	16	13.8
II	7	15.2
III	4	16.7
IV	0	0
V	2	12.5
VII	0	0
VIII	3	25.0
PC	11	15.7
PO	5	10.9

65. Number of Cars on Access Road 1,000 to 4,999 (A.A.D.T.)

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	17	14.7
II	10	21.8
III	2	8.4
IV	0	0
V	1	6.2
VII	2	12.5
VIII	2	16.7
PC	12	17.1
PO	5	10.9

66. Number of Cars on Access Road 5,000 to 9,999 (A.A.D.T.)

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	27	23.3
II	11	24.0
III	7	29.2
IV	0	0
V	3	18.8
VII	2	12.5
VIII	4	33.3
PC	18	25.8
PO	9	19.6

67. Number of Cars on Access Road More than 10,000 (A.A.D.T.)

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	40	34.5
II	11	24.0
III	8	33.3
IV	2	100.0
V	8	50.0
VII	9	56.4
VIII	2	16.7
PC	19	27.2
PO	21	45.7

APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)

68. Facilities in the Nearest Town (in Rank Order)

A. Total

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	116	100
2	5	116	100
3	9	113	97.4
4	7	112	96.6
5	10	110	94.8
6	6	106	91.4
7	2	103	88.7
8	8	99	85.3
9	16	95	81.8
10	13	90	77.6
11	12	79	68.1
12	11	71	61.2
13	14	69	59.4
14	15	55	47.4
15	4	54	46.6
16	3	46	39.6
17	7	11	9.4

B. RECREATION DIVISION II

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	46	100
2	5	46	100
3	10	46	100
4	6	45	97.9
5	7	45	97.9
6	9	44	95.7
7	2	40	87.0
8	16	40	87.0
9	8	37	80.6
10	13	31	67.4
11	14	27	58.7
12	12	26	56.5
13	15	24	52.2
14	4	22	47.8
15	3	21	45.7
16	11	11	24.0
17	17	1	2.2

(Refer to Legend on page 2-21)

68. Facilities in the Nearest Town (in Rank Order) (cont'd.)

C. RECREATION DIVISION III

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	24	100
2	9	24	100
3	5	24	100
4	6	23	95.8
5	7	23	95.8
6	2	21	87.6
7	8	21	87.6
8	10	20	83.4
9	13	19	79.2
10	11	17	71.8
11	16	15	62.5
12	12	14	58.4
13	4	11	45.8
14	14	11	45.8
15	15	11	45.8
16	3	8	33.3
17	17	2	8.4

D. RECREATION DIVISION IV

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	2	100
2	5	2	100
3	6	2	100
4	7	2	100
5	8	2	100
6	9	2	100
7	10	2	100
8	12	2	100
9	13	2	100
10	17	2	100
11	2	1	50.0
12	3	1	50.0
13	11	1	50.0
14	14	1	50.0
15	15	1	50.0
16	16	1	50.0
17	4	0	0

APPENDIX 2, PERCENTAGE OCCURRENCE OF VARIABLES BY RECREATION DIVISION (cont'd.)

68. Facilities in the Nearest Town (in Rank Order) (cont'd.)

E. RECREATION DIVISION V

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	16	100
2	5	16	100
3	6	16	100
4	9	16	100
5	7	15	93.8
6	10	15	93.8
7	2	14	87.5
8	8	13	81.3
9	11	12	75.0
10	13	12	75.0
11	16	12	75.0
12	12	11	68.8
13	15	9	56.4
14	14	6	38.6
15	3	5	32.2
16	4	4	25.0
17	17	0	0.0

F. RECREATION DIVISION VII

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	16	100
2	2	16	100
3	5	16	100
4	7	16	100
5	9	16	100
6	10	16	100
7	12	16	100
8	13	16	100
9	14	16	100
10	16	16	100
11	8	14	87.5
12	4	9	56.4
13	6	9	56.4
14	15	9	56.4
15	17	7	43.8
16	11	5	32.2
17	3	4	25.0

68. Facilities in the Nearest Town (in Rank Order) (cont'd.)

G. RECREATION DIVISION VIII

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	12	100
2	8	12	100
3	5	12	100
4	2	11	91.6
5	6	11	91.6
6	7	11	91.6
7	9	11	91.6
8	10	11	91.6
9	12	10	83.4
10	13	10	83.4
11	16	10	83.4
12	4	8	66.6
13	11	8	66.6
14	14	8	66.6
15	7	3	25.0
16	15	1	8.4
17	17	1	8.4

H. PRE–CAMBRIAN SHIELD

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	70	100
2	5	70	100
3	6	68	97.2
4	7	68	97.2
5	9	68	97.2
6	10	66	94.3
7	2	61	87.0
8	8	58	82.8
9	16	55	79.2
10	13	50	71.5
11	11	45	64.2
12	12	40	57.2
13	14	38	54.3
14	15	35	50.0
15	4	33	47.1
16	3	29	41.4
17	17	3	4.2

(Refer to Legend on page 2-21)

**APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)**

68. Facilities in the Nearest Town (in Rank Order) (cont'd.)

I. PENINSULAR ONTARIO

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	46	100
2	5	46	100
3	9	45	97.9
4	10	44	95.7
5	7	44	95.7
6	2	42	91.4
7	8	41	89.2
8	13	40	87.0
9	16	40	87.0
10	12	39	84.9
11	6	38	82.7
12	14	31	67.4
13	11	26	56.5
14	4	21	45.7
15	15	20	43.5
16	3	17	37.0
17	17	8	17.4

LEGEND

1	Gasoline/Automobile Service
2	Marina Services
3	Air Services
4	Railway Station
5	Post Office
6	Church(es)
7	Tourist Accommodation
8	Sporting Goods Store
9	Grocery Store
10	Restaurant
11	Fish Packing
12	Public Beach
13	Public Park
14	Movie Theatre
15	Golfing Facilities
16	Dancing
17	Amusements

69. Area Competition - Tourist Establishments

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	101	87.1
II	38	82.7
III	22	91.7
IV	2	100.0
V	15	93.8
VII	14	87.5
VIII	10	83.4
PC	60	85.6
PO	41	89.2

70. Area Competition - Motel

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	30	25.8
II	10	21.8
III	3	12.5
IV	0	0
V	6	38.6
VII	9	56.4
VIII	2	16.7
PC	13	18.4
PO	17	37.0

71. Area Competition - Hotel

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	33	28.5
II	10	21.8
III	3	12.5
IV	0	0
V	7	43.8
VII	11	68.8
VIII	2	16.7
PC	13	18.4
PO	20	43.5

72. Area Competition - Conservation Authority Parks

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	2	1.7
II	1	2.2
III	0	0
IV	0	0
V	0	0
VII	0	0
VIII	1	8.4
PC	1	1.4
PO	1	2.2

73. Area Competition - Provincial Parks

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	25	21.6
II	5	10.9
III	6	25.0
IV	1	50.0
V	2	12.5
VII	9	56.4
VIII	2	16.7
PC	11	15.7
PO	14	30.4

74. Area Competition - Public Dock

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	51	44.0
II	17	37.0
III	6	25.0
IV	1	50.0
V	13	81.3
VII	8	50.0
VIII	6	50.0
PC	23	32.8
PO	28	60.8

APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)

75. Area Competition - Public Beach

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	55	47.5
II	17	37.0
III	5	20.8
IV	2	100.0
V	12	75.0
VII	14	87.5
VIII	5	41.6
PC	22	31.4
PO	33	71.8

76. Area Competition - Organized Camps

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	30	25.8
II	14	30.4
III	8	33.3
IV	1	50.0
V	5	32.5
VII	0	0
VIII	2	16.7
PC	22	31.4
PO	8	17.4

77. Area Competition - Boat Livery

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	49	42.3
II	15	32.6
III	3	12.5
IV	0	0
V	13	81.3
VII	13	81.3
VIII	5	41.6
PC	18	25.8
PO	31	67.4

78. Area Competition - Agricultural Land

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	53	45.7
II	16	34.8
III	16	66.6
IV	2	100.0
V	10	62.5
VII	2	12.5
VIII	7	58.4
PC	32	45.7
PO	21	45.7

79. Stage of Life: Young Unmarried

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	11	9.5
II	3	6.6
III	0	0
IV	0	0
V	2	12.5
VII	3	18.8
VIII	0	0
PC	3	4.2
PO	5	10.9
Total	8	7.2

80. Stage of Life: Married without Family

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	36	31.0
II	9	19.6
III	1	4.2
IV	0	0
V	2	12.5
VII	6	38.6
VIII	2	16.7
PC	10	14.3
PO	10	21.8
Total	20	17.3

81. Stage of Life: Married with Young Family

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	93	80.2
II	27	58.7
III	12	50.0
IV	1	50.0
V	9	56.4
VII	5	32.2
VIII	9	75.0
PC	39	55.7
PO	24	52.2
Total	63	54.2

82. Stage of Life: Married with Teen-Age Family

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	81	69.8
II	2	4.4
III	8	33.3
IV	0	0
V	2	12.5
VII	1	6.2
VIII	1	8.4
PC	10	14.3
PO	4	8.7
Total	14	12.1

83. Stage of Life: Older Couple without Family

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	49	42.3
II	2	4.4
III	2	8.4
IV	1	50.0
V	1	6.2
VII	1	6.2
VIII	0	0
PC	4	5.7
PO	3	6.6
Total	7	6.1

84. Stage of Life: Elderly

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	12	10.4
II	0	
III	0	
IV	0	
V	0	
VII	0	
VIII	0	
PC	0	
PO	0	
Total	0	

85. Stage of Life: Groups of Families

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	8	7.2
II	0	
III	0	
IV	0	
V	0	
VII	0	
VIII	0	
PC	0	
PO	0	
Total	0	

86. Stage of Life: Fishermen

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	30	25.8
II	3	6.6
III	1	4.2
IV	0	0
V	0	0
VII	0	0
VIII	0	0
PC	4	5.7
PO	0	0
Total	4	3.4

		UI	69.8
3	6	40	34.5
4	2	34	29.3
5	4	33	28.5
6	7	22	19.0
7	3	12	10.4
8	8	6	5.2
9	9	6	5.2

B. RECREATION DIVISION II

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	22	47.8
2	5	16	34.8
3	4	4	8.7
4	8	2	4.4
5	2	1	2.2
6	7	1	2.2
7	3	0	0.0
8	6	0	0.0
9	9	0	0.0

C. RECREATION DIVISION III

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	5	22	91.7
2	1	13	54.2
3	2	6	25.0
4	6	6	25.0
5	4	4	16.7
6	7	2	8.4
7	3	1	4.2
8	8	1	4.2
9	9	0	0.0

LEGEND

1	Relaxing
2	Socializing
3	Group Activity
4	Individual Sports
5	Water Sports
6	Family Outing
7	Sightseeing
8	Hiking
9	Nature Study

APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)

88. Activities Most Important to Guests (in Rank Order) (cont'd.)

D. RECREATION DIVISION IV

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	5	2	100.0
2	1	1	50.0
3	6	1	50.0
4	7	1	50.0
5	2,3,4,8,9	0	0.0

E. RECREATION DIVISION V

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	5	15	93.8
2	1	10	62.5
3	6	8	50.0
4	2	6	38.6
5	4	4	25.0
6	3	2	12.5
7	7	2	12.5
8	8,9	0	0.0

F. RECREATION DIVISION VII

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	5	11	68.8
2	1	10	62.5
3	4	7	43.8
4	6	6	38.6
5	2	5	32.2
6	7	5	32.2
7	3	2	12.5
8	8,9	0	0.0

LEGEND

1 Relaxing
2 Socializing
3 Group Activity
4 Individual Sports
5 Water Sports
6 Family Outing
7 Sightseeing
8 Hiking
9 Nature Study

88. Activities Most Important to Guests (in Rank Order) (cont'd.)

G. RECREATION DIVISION VIII

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	9	75.0
2	5	9	75.0
3	7	3	25.0
4	4	2	16.7
5	6	2	16.7
6	8	2	16.7
7	2	1	8.4
8	9	1	8.4
9	3	0	0.0

H. PRE-CAMBRIAN SHIELD

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	5	61	87.0
2	1	50	71.4
3	6	23	32.8
4	2	22	31.4
5	4	20	28.6
6	7	11	15.7
7	3	8	11.4
8	9	5	7.1
9	8	4	5.7

I. PENINSULAR ONTARIO

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	5	38	82.7
2	1	31	67.4
3	6	17	37.0
4	4	13	28.3
5	2	12	26.1
6	7	11	24.0
7	3	4	8.7
8	8	2	4.4
9	9	1	2.2

LEGEND

1   Relaxing
2   Socializing
3   Group Activity
4   Individual Sports
5   Water Sports
6   Family Outing
7   Sightseeing
8   Hiking
9   Nature Study

89. Socio-Economic Class: Professional

Trend

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	44	37.9
II	17	37.0
III	10	41.7
IV	0	0
V	4	25.0
VII	5	32.2
VIII	4	33.3
PC	27	38.5
PO	13	28.3
Total	40	34.5

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	4	3.4
II	2	4.4
III	0	0
IV	0	0
V	1	6.2
VII	1	6.2
VIII	0	0
PC	2	2.8
PO	2	4.4

90. Socio-Economic Class: White Collar

Trend

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	75	64.7
II	15	32.6
III	7	29.2
IV	1	50.0
V	5	32.2
VII	4	25.0
VIII	1	8.4
PC	22	31.4
PO	11	24.0
Total	33	28.4

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	4	3.4
II	1	2.2
III	2	8.4
IV	0	0
V	0	0
VII	1	6.2
VIII	0	0
PC	3	4.2
PO	1	2.2

91. Socio-Economic Class: Blue Collar

Trend

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	57	49.2
II	11	24.0
III	4	16.7
IV	1	50.0
V	5	32.2
VII	5	32.2
VIII	5	41.6
PC	15	21.4
PO	16	34.8
Total	31	24.6

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	20	17.3
II	6	13.0
III	3	12.5
IV	0	0
V	3	18.8
VII	3	18.8
VIII	5	41.6
PC	9	12.8
PO	11	24.0

92. Socio-Economic Class:
    Labourer   Trend

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	10	8.6
II	0	
III	0	
IV	0	
V	0	
VII	0	
VIII	0	
PC	0	
PO	0	
Total	0	

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	1	.86
II	1	
III	0	
IV	0	
V	0	
VII	0	
VIII	0	
PC	1	1.4
PO	0	

93. Socio-Economic Class:
    Professional and White Collar   Trend

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	15	13.0
II	3	6.6
III	3	12.5
IV	0	0
V	2	12.5
VII	2	12.5
VIII	2	16.7
PC	6	8.5
PO	6	13.0
Total	12	10.4

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	1	
II	0	0
III	1	4.2
IV	0	0
V	0	0
VII	0	0
VIII	0	0
PC	1	1.4
PO	0	0

94. Socio-Economic Class:
    Blue Collar and Labourer   Trend

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	7	6.0
II	0	0
III	0	0
IV	0	0
V	0	0
VII	0	0
VIII	0	0
PC	0	0
PO	0	0
Total	0	0

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	1	
II	1	2.2
III	0	
IV	0	
V	0	
VII	0	
VIII	0	
PC	1	1.4
PO	0	

APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)

95. Socio-Economic Class: Farm

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	1	.86
II	0	
III	0	
IV	0	
V	0	
VII	0	
VIII	0	
PC	0	
PO	0	
Total	0	

Trend

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	1	.86
II	0	
III	0	
IV	0	
V	0	
VII	1	6.2
VIII	0	
PC	0	
PO	1	2.2

96. Vacation Length - 1 Week

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	86	74.1
II	30	65.2
III	15	62.5
IV	2	100.0
V	7	43.8
VII	8	50.0
VIII	9	75.0
PC	45	64.2
PO	26	56.5

Trend

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	19	16.3
II	8	17.4
III	2	8.4
IV	0	0
V	1	6.2
VII	5	32.2
VIII	3	25.0
PC	10	14.3
PO	9	19.6

97. Vacation Length - 2 Weeks

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	62	53.4
II	6	13.0
III	6	25.0
IV	0	0
V	1	6.2
VII	2	12.5
VIII	0	0
PC	12	17.1
PO	3	6.6
Total	15	12.9

Trend

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	4	3.4
II	1	2.2
III	1	4.2
IV	0	0
V	0	0
VII	1	6.2
VIII	1	8.4
PC	2	2.8
PO	2	4.4

98. Vacation Length - 3 Weeks

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	3	2.6
II	0	
III	0	
IV	0	
V	0	
VII	0	
VIII	0	
PC	0	
PO	0	

Trend

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total		
II	1	2.2
III	0	
IV	0	
V	0	
VII	0	
VIII	0	
PC	1	1.4
PO	0	

99. Vacation Length - Month

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	8	7.2
II	1	2.2
III	0	0
IV	0	0
V	0	0
VII	1	6.2
VIII	0	0
PC	1	1.4
PO	1	2.2
Total	2	1.7

Trend

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	1	0.8
II	1	2.2
III	0	0
IV	0	0
V	0	0
VII	0	0
VIII	0	0
PC	1	1.4
PO	0	

100. Vacation Length - Season

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	4	3.4
II	0	
III	0	
IV	0	
V	1	6.2
VII	0	
VIII	0	
PC	0	
PO	1	2.2
Total	1	0.8

Trend

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	1	
II	0	
III	0	
IV	0	
V	1	6.2
VII	0	
VIII	0	
PC	0	
PO	1	2.2

101. Vacation Length - Weekends   Trend

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	28	24.1
II	8	17.4
III	3	12.5
IV	0	0
V	7	43.8
VII	2	12.5
VIII	1	8.4
PC	11	15.7
PO	10	21.8
Total	21	18.1

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	2	
II	1	2.2
III	1	4.2
IV	0	0
V	0	0
VII	0	0
VIII	0	0
PC	2	2.8
PO	0	0

102. Vacation Length - 2 to 3 days (not weekend)   Trend

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	8	7.2
II	1	2.2
III	0	0
IV	0	0
V	0	0
VII	0	0
VIII	1	8.4
PC	1	1.4
PO	1	2.2
Total	2	1.7

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	0	0
II	0	0
III	0	0
IV	0	0
V	0	0
VII	0	0
VIII	0	0
PC	0	0
PO	0	0

103. Vacation Length - Overnight   Trend

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	5	4.3
II	0	0
III	0	0
IV	0	0
V	0	0
VII	3	18.8
VIII	1	8.4
PC	0	0
PO	4	8.7
Total	4	3.4

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total		
II	0	
III	0	
IV	0	
V	0	
VII	0	
VIII	0	
PC	0	
PO	0	

104. Vacation Length Trends

Total:

VACATION LENGTH	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
1 Week	19	16.4
2 Weeks	4	3.4
3 Weeks	1	.86
Month	1	.86
Season	1	.86
Weekend	2	1.7
Shorter	30	25.8
Longer	8	7.2

105. Activities Available (in Rank Order)

A. Total

RANK	ACTIVITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	101	87.1
2	2	97	83.7
3	5	51	44.0
4	4	48	41.4
5	8	17	14.7
6	7	12	10.4

B. RECREATION DIVISION II

RANK	ACTIVITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	37	80.6
2	2	37	80.6
3	5	20	43.5
4	4	16	34.8
5	8	9	19.6
6	3	7	15.2
7	6	5	10.9
8	7	5	10.9

C. RECREATION DIVISION III

RANK	ACTIVITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	2	24	100.0
2	1	22	91.7
3	4	9	37.5
4	5	6	25.0
5	6	5	20.8
6	7	3	12.5
7	8	3	12.5
8	3	2	8.4

APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)

105. Activities Available (in Rank Order) (cont'd.)

D. RECREATION DIVISION IV

RANK	ACTIVITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	2	100.0
2	2	2	100.0
3	5	1	50.0
4	3,4,6,7,8	0	0.0

E. RECREATION DIVISION V

RANK	ACTIVITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	16	100.0
2	2	15	93.8
3	4	9	56.4
4	5	6	38.6
5	6	4	25.0
6	7	3	18.8
7	3	1	6.2
8	8	1	6.2

F. RECREATION DIVISION VII

RANK	ACTIVITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	14	87.5
2	5	11	68.8
3	2	10	62.5
4	4	10	62.5
5	6	4	25.0
6	3	1	6.2
7	7	1	6.2
8	8	0	0.0

LEGEND

1   Water Sports
2   Fishing
3   Organized Sports
4   Individual Sports
5   Sightseeing
6   Group Activity
7   Instruction
8   Nature Study

105. Activities Available (in Rank Order) (cont'd.)

G. RECREATION DIVISION VIII

RANK	ACTIVITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	10	83.4
2	2	9	75.0
3	5	7	58.4
4	4	4	33.3
5	6	2	16.7
6	8	2	16.7
7	3,8	0	0.0

H. PRE-CAMBRIAN SHIELD

RANK	ACTIVITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	2	61	87.0
2	1	59	84.2
3	5	26	37.1
4	4	25	35.6
5	8	14	20.0
6	6	10	14.3
7	3	9	12.8
8	7	8	11.4

I. PENINSULAR ONTARIO

RANK	ACTIVITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	42	91.4
2	2	36	78.4
3	5	25	54.4
4	4	23	50.0
5	6	10	21.8
6	7	4	8.7
7	8	3	6.6
8	3	2	4.4

LEGEND

1   Water Sports
2   Fishing
3   Organized Sports
4   Individual Sports
5   Sightseeing
6   Group Activity
7   Instruction
8   Nature Study

106. Trends in Activities Popular at Resorts (in Rank Order)

A. Total

RANK	ACTIVITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	37	32.0
2	4	14	12.1
3	5	10	8.6
4	8	7	6.1
5	7	6	5.2
6	6	4	3.4
7	9	4	3.4
8	2	2	1.7

B. RECREATION DIVISION II

RANK	ACTIVITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	14	30.4
2	4	7	15.2
3	5	6	13.0
4	8	4	8.7
5	7	3	6.6
6	6	1	2.2
7	1	1	2.2

C. RECREATION DIVISION III

RANK	ACTIVITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	11	45.8
2	7	3	12.5
3	4	2	8.4
4	8	2	8.4
5	2	1	4.2
6	3	1	4.2
7	6	1	4.2

LEGEND

1	Water Sports
2	Fishing
3	Organized Sports
4	Individual Sports
5	Sightseeing
6	Group Activity
7	Instruction
8	Nature Study
9	Skiing

106. Trends in Activities Popular at Resorts (in Rank Order) (cont'd.)

D. RECREATION DIVISION IV

RANK	ACTIVITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	1	50.0

E. RECREATION DIVISION V

RANK	ACTIVITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	3	18.8
2	4	2	12.5

F. RECREATION DIVISION VII

RANK	ACTIVITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	7	43.8
2	4	2	12.5
3	5	2	12.5
4	6	1	6.2

G. RECREATION DIVISION VIII

RANK	ACTIVITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	3	25.0
2	4	5	16.7
3	5	4	8.4
4	6	2	4.4
5	8	1	2.2

H. PRE-CAMBRIAN SHIELD

RANK	ACTIVITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	25	35.6
2	4	9	12.8
3	5	6	8.5
4	7	6	8.5
5	8	6	8.5
6	2	2	2.8
7	6	2	2.8
8	3	1	1.4

I. PENINSULAR ONTARIO

RANK	ACTIVITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	1	14	30.4
2	4	5	10.9
3	5	4	8.7
4	6	2	4.4
5	8	1	2.2

APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)

2-39

107. Distance Travelled - One-Way Origin to Destination (in Rank Order)

A. Total

RANK	DISTANCE	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	7	32	27.6
2	6	30	25.8
3	5	22	19.0
4	8	21	18.2
5	9	4	3.4
6	2	4	3.4
7	1	1	0.9
8	3	1	0.9
9	4	1	0.9

B. RECREATION DIVISION II

RANK	DISTANCE	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	6	17	37.5
2	8	10	21.8
3	5	9	19.6
4	7	8	17.4

C. RECREATION DIVISION III

RANK	DISTANCE	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	7	9	37.5
2	8	7	29.2
3	6	3	12.5
4	9	2	8.4
5	1	1	4.2
6	2	1	4.2
7	5	1	4.2

D. RECREATION DIVISION IV

RANK	DISTANCE	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	5	1	50.0
2	7	1	50.0

LEGEND

1	1 - 25 mi.
2	26 - 50 mi.
3	51 - 75 mi.
4	76 - 100 mi.
5	101 - 150 mi.
6	151 - 200 mi.
7	201 - 300 mi.
8	301 - 500 mi.
9	More Than 500 mi.

**APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)**

107. Distance Travelled - One-Way Origin to Destination (in Rank Order) (cont'd.)

E. RECREATION DIVISION V

RANK	DISTANCE	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	2	3	18.8
2	5	3	18.8
3	6	3	18.8
4	7	3	18.8
5	8	2	12.5
6	3	1	6.2
7	4	1	6.2

F. RECREATION DIVISION VII

RANK	DISTANCE	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	5	7	43.8
2	6	5	32.2
3	7	4	25.0

G. RECREATION DIVISION VIII

RANK	DISTANCE	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	7	7	58.4
2	6	2	16.7
3	8	2	16.7
4	5	1	8.4

H. PRE-CAMBRIAN SHIELD

RANK	DISTANCE	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	6	20	28.6
2	7	17	24.3
3	8	17	24.3
4	5	10	14.3
5	9	4	5.7
6	1	1	1.4
7	2	1	1.4

I. PENINSULAR ONTARIO

RANK	DISTANCE	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	7	15	32.6
2	5	12	26.1
3	6	10	21.8
4	8	4	8.7
5	2	3	6.6
6	3	1	2.2
7	4	1	2.2

**APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)**

108. Distance Travelled - Trends (See Figures 22 to 29)

RESORT AREAS	TRENDS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	None	58	50.0
	Longer	24	20.7
	Shorter	34	29.3
II	None	23	50.0
	Longer	8	17.4
	Shorter	15	32.6
III	None	13	54.2
	Longer	6	25.0
	Shorter	5	20.8
IV	None	2	100.0
	Longer	0	0
	Shorter	0	0
V	None	6	38.6
	Longer	5	32.2
	Shorter	5	32.2
VII	None	9	56.4
	Longer	3	18.8
	Shorter	4	25.0
VIII	None	5	41.6
	Longer	2	16.7
	Shorter	5	41.6
PC	None	36	51.4
	Longer	14	20.0
	Shorter	20	28.6
PO	None	22	47.8
	Longer	10	21.8
	Shorter	14	30.4

109. Recent Additions - New Buildings

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	35	30.1
II	16	34.8
III	9	37.5
IV	1	50.0
V	5	32.2
VII	3	18.8
VIII	1	8.4
PC	25	35.6
PO	10	21.8

110. Type of Recent Additions (in Rank Order)

A. Total

RANK	ADDITIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	ACC	10	8.6
2	MU	10	8.6
3	REC	5	4.3
4	C	4	3.4
5	ACC & REC	3	2.5
6	CA	1	0.8
7	DR	1	0.8

B. RECREATION DIVISION II

RANK	ADDITIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	ACC	4	8.7
2	MU	3	6.6
3	C	3	6.6
4	ACC & REC	2	4.4
5	DR	1	2.2
6	REC	1	2.2
7	CA	1	2.2

C. RECREATION DIVISION III

RANK	ADDITIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	ACC	5	20.8
2	MU	3	12.5
3	REC	1	4.2

D. RECREATION DIVISION IV

RANK	ADDITIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	ACC & REC	1	50.0

LEGEND

C	Cottages
CA	Cabins
MU	Motel Type Units
ACC	Accommodation
REC	Recreation Facilities
DR	Dining Facilities

APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)

110. Type of Recent Additions (in Rank Order) (cont'd.)

E. RECREATION DIVISION V

RANK	ADDITIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	REC	2	12.5
2	MU	2	12.5
3	ACC	1	6.2

F. RECREATION DIVISION VII

RANK	ADDITIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	MU	2	12.5
2	REC	1	6.2

G. RECREATION DIVISION VIII

RANK	ADDITIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	C	1	8.4

H. PRE-CAMBRIAN SHIELD

RANK	ADDITIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	ACC	9	12.8
2	MU	6	8.5
3	C	3	4.2
4	ACC & REC	2	2.8
5	REC	2	2.8
6	CA	1	1.4
7	DR	1	1.4

I. PENINSULAR ONTARIO

RANK	ADDITIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	MU	4	8.7
2	REC	3	6.6
3	ACC	1	2.2
4	ACC & REC	1	2.2
5	C	1	2.2

111. Recent Additions - "YES" - Why? - "Increased Business"

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	31	26.7
II	14	30.4
III	8	33.3
IV	0	0
V	5	32.2
VII	2	12.2
VIII	1	8.4
PC	22	31.4
PO	9	19.6

112. Recent Addition - "YES" - Why? - "Popular Demand"

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	4	3.4
II	1	2.2
III	2	8.4
IV	0	0
V	0	0
VII	1	6.2
VIII	0	0
PC	3	4.2
PO	1	2.2

APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)

113. Recent Additions - "NO" - Why? (in Rank Order)

A. Total

RANK	ADDITIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	WNE	17	14.6
2	NP	15	12.9
3	NN	15	12.9
4	CA	7	6.0
5	NR	1	0.8

B. RECREATION DIVISION II

RANK	ADDITIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	WNE	9	19.6
2	NN	6	13.0
3	NP	5	10.9
4	CA	1	2.2

C. RECREATION DIVISION III

RANK	ADDITIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	NP	4	16.7
2	NN	3	12.5
3	WNE	2	8.4

D. RECREATION DIVISION IV   No Data

E. RECREATION DIVISION V

RANK	ADDITIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	NN	2	12.5
2	WNE	2	12.5
3	NP	1	6.2
4	CA	1	6.2
5	NR	1	6.2

LEGEND

WNE   Will Not Enlarge
NN   Not Necessary
NP   Not Profitable
NR   Near Retirement
CA   Cannot Afford

113. Recent Additions - "NO" - Why? (in Rank Order) (cont'd.)

F. RECREATION DIVISION VII

RANK	ADDITIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	CA	3	18.8
2	NN	2	12.5
3	NP	2	12.5
4	WNE	1	6.2

G. RECREATION DIVISION VIII

RANK	ADDITIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	NP	3	25.0
2	WNE	3	25.0
3	CA	2	16.7
4	NN	2	16.7

H. PRE-CAMBRIAN SHIELD

RANK	ADDITIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	WNE	11	13.7
2	NN	9	12.8
3	NP	9	12.8
4	CA	1	1.4

I. PENINSULAR ONTARIO

RANK	ADDITIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	NN	6	13.0
2	CA	6	13.0
3	NP	6	13.0
4	WNE	6	13.0
5	NR	1	2.2

LEGEND

WNE Will Not Enlarge
NN Not Necessary
NP Not Profitable
NR Near Retirement
CA Cannot Afford

APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)

114. Recent Renovations (all Types)

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	37	31.8
II	16	34.8
III	8	33.3
IV	0	0
V	7	43.8
VII	4	25.0
VIII	2	16.7
PC	24	34.2
PO	13	28.3

115. Type of Recent Renovations (in Rank Order)

A. Total

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	ACC	18	15.5
2	REC	6	5.2
3	ACC & REC	6	5.2
4	DR	4	3.4
5	C	1	0.8

B. RECREATION DIVISION II

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	ACC	9	19.6
2	REC	2	4.4
3	ACC & REC	2	4.4
4	DR	1	2.2
5	C	1	2.2

C. RECREATION DIVISION III

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	REC	3	12.5
2	ACC & REC	2	8.4
3	ACC	1	4.2
4	DR	1	4.2

LEGEND

C   Cottages
ACC   Accommodation
REC   Recreation Facilities
DR   Dining Facilities

115. Type of Recent Renovations (in Rank Order) (cont'd.)

D. RECREATION DIVISION IV No Data

E. RECREATION DIVISION V

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	ACC	4	25.0
2	ACC & REC	2	12.5
3	REC	1	6.2

F. RECREATION DIVISION VII

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	ACC	2	12.5
2	DR	2	12.5

G. RECREATION DIVISION VIII

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	ACC	2	16.7

H. PRE-CAMBRIAN SHIELD

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	ACC	10	14.3
2	REC	5	7.1
3	ACC & REC	4	5.7
4	DR	2	2.8
5	C	1	1.4

I. PENINSULAR ONTARIO

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	ACC	8	17.4
2	ACC & REC	2	4.4
3	REC	1	2.2
4	DR	1	2.2

LEGEND

C   Cottages
ACC   Accommodation
REC   Recreation Facilities
DR   Dining Facilities

APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)

116. Recent Renovations - "YES" - Why? (in Rank Order)

A. Total

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	OD	18	15.5
2	IB	14	12.1
3	PD	5	4.2

B. RECREATION DIVISION II

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	OD	10	21.8
2	PD	3	6.6
3	IB	3	6.6

C. RECREATION DIVISION III

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	IB	5	20.8
2	OD	2	8.4
3	PD	1	4.2

D. RECREATION DIVISION IV   No Data

E. RECREATION DIVISION V

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	IB	4	25.0
2	OD	2	12.5
3	PD	1	6.2

LEGEND

PD   Popular Demand
OD   Outdated
IB   Increased Business

116. Recent Renovations - "YES" - Why? (in Rank Order) (cont'd.)

F. RECREATION DIVISION VII

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	OD	3	18.8
2	IB	1	6.2

G. RECREATION DIVISION VIII

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	IB	1	8.4
2	OD	1	8.4

H. PRE-CAMBRIAN SHIELD

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	OD	12	17.1
2	IB	8	11.4
3	PD	4	5.7

I. PENINSULAR ONTARIO

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	IB	6	13.0
2	OD	6	13.0
3	PD	1	2.2

LEGEND

PD   Popular Demand
OD   Outdated
IB   Increased Business

APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)

117. Recent Renovations - "NO" - Why? (in Rank Order)

A. Total

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	NN	47	40.4
2	NP	4	3.4
3	CA	4	3.4
4	WNE	1	0.8
5	NR	1	0.8

B. RECREATION DIVISION II

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	NN	15	32.6
2	NP	1	2.2
3	CA	1	2.2
4	WNE	1	2.2

C. RECREATION DIVISION III

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	NN	9	37.5
2	NP	3	12.5

D. RECREATION DIVISION IV

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	NN	2	100.0

E. RECREATION DIVISION V

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	NN	5	32.2
2	NR	1	6.2

F. RECREATION DIVISION VII

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	NN	8	50.0
2	CA	2	12.5

LEGEND

WNE	Will Not Enlarge
NN	Not Necessary
NP	Not Profitable
NR	Near Retirement
CA	Cannot Afford

APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)

117. Recent Renovations - "NO" - Why? (in Rank Order) (cont'd.)

G. RECREATION DIVISION VIII

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	NN	8	66.6
2	CA	1	8.4

H. PRE-CAMBRIAN SHIELD

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	NN	24	34.2
2	NP	4	5.7
3	WNE	1	1.4
4	CA	1	1.4

I. PENINSULAR ONTARIO

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	NN	23	50.0
2	CA	3	6.6
3	NR	1	2.2

LEGEND

WNE	Will Not Enlarge
NN	Not Necessary
NP	Not Profitable
NR	Near Retirement
CA	Cannot Afford

118. Planned Additions (all Types)

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	37	31.8
II	16	34.8
III	11	45.8
IV	1	50.0
V	4	25.0
VI'	3	18.8
VIII	2	16.7
PC	27	38.5
PO	10	21.8

APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)

119. Type of Additions Planned (in Rank Order)

A. Total

RANK	ADDITIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	C	10	8.6
2	MU	8	7.2
3	ACC	6	5.2
4	REC	6	5.2

B. RECREATION DIVISION II

RANK	ADDITIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	C	5	10.9
2	MU	3	6.6
3	REC	3	6.6
4	ACC	1	2.2

C. RECREATION DIVISION III

RANK	ADDITIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	ACC	3	12.5
2	C	3	12.5
3	MU	2	8.4
4	REC	2	8.4

D. RECREATION DIVISION IV No Data

E. RECREATION DIVISION V

RANK	ADDITIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	ACC	2	12.5
2	REC	1	6.2

F. RECREATION DIVISION VII

RANK	ADDITIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	MU	2	12.5
2	C	1	6.2

LEGEND

C   Cottages
MU   Motel Type Units
ACC   Accommodation Units (not specified as to Type)
REC   Recreation Facilities (not specified as to Type)

APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)

119. Type of Additions Planned (in Rank Order) (cont'd.)

G. RECREATION DIVISION VIII

RANK	ADDITIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	MU	1	8.4
2	C	1	8.4

H. PRE-CAMBRIAN SHIELD

RANK	ADDITIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	C	8	11.4
2	MU	5	7.1
3	REC	5	7.1
4	ACC	4	5.7

I. PENINSULAR ONTARIO

RANK	ADDITIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	MU	3	6.6
2	ACC	2	4.4
3	C	2	4.4
4	REC	1	2.2

(Refer to Legend on page 2-53)

120. Planned Additions - "YES" - Why? (in Rank Order)

A. Total

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	IB	30	25.8
2	PD	7	6.1
3	OD	1	0.8

B. RECREATION DIVISION II

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	IB	10	21.8
2	PD	5	10.2
3	OD	1	0.8

C. RECREATION DIVISION III

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	IB	10	41.7
2	PD	1	4.2

(Refer to Legend on page 2-55)

120. Planned Additions - "YES" - Why? (in Rank Order) (cont'd.)

D. RECREATION DIVISION IV

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	IB	1	50.0

E. RECREATION DIVISION V

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	IB	4	25.0

F. RECREATION DIVISION VII

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	IB	3	18.8
2	PD	1	6.2

G. RECREATION DIVISION VIII

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	IB	2	16.7

H. PRE-CAMBRIAN SHIELD

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	IB	20	28.6
2	PD	6	8.5
3	OD	1	1.4

I. PENINSULAR ONTARIO

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	IB	10	21.8
2	PD	1	2.2

LEGEND

PD   Popular Demand
OD   Outdated
IB   Increased Business

121. Planned Additions - "NO" - Why? (in Rank Order)

A. Total

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	WNE	30	25.8
2	CA	13	11.2
3	NP	10	8.6
4	NR	9	8.0
5	NN	4	3.4

B. RECREATION DIVISION II

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	WNE	14	30.4
2	NP	5	10.9
3	CA	3	6.6
4	NR	3	6.6
5	NN	2	4.4

C. RECREATION DIVISION III

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	WNE	5	20.8
2	NR	3	12.5
3	NP	2	8.4
4	NN	1	4.2
5	CA	1	4.2

D. RECREATION DIVISION IV   No Data

E. RECREATION DIVISION V

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	CA	4	25.0
2	WNE	3	18.8
3	NP	2	12.5
4	NR	1	6.2

LEGEND

WNE	Will Not Enlarge
NN	Not Necessary
NP	Not Profitable
NR	Near Retirement
CA	Cannot Afford

APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)

121. Planned Additions - "NO" - Why? (in Rank Order) (cont'd.)

F. RECREATION DIVISION VII

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	WNE	3	18.8
2	CA	2	12.5
3	NN	1	6.2
4	NP	1	6.2

G. RECREATION DIVISION VIII

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	WNE	5	41.6
2	CA	3	25.0
3	NR	2	16.7

H. PRE-CAMBRIAN SHIELD

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	WNE	19	27.2
2	NP	7	9.9
3	NR	6	8.5
4	CA	4	5.7
5	NN	3	4.2

I. PENINSULAR ONTARIO

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	WNE	11	24.0
2	CA	9	12.8
3	NP	3	4.2
4	NR	3	4.2
5	NN	1	1.4

122. Planned Renovations

RESORT AREAS	NUMBER OF RESORTS	PERCENT OF RESORTS IN AREA
Total	33	28.4
II	13	28.3
III	9	37.5
IV	0	0
V	7	43.8
VII	1	6.2
VIII	3	25.0
PC	22	31.4
PO	11	24.8

123. Type of Renovations Planned (in Rank Order)

A. Total

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	ACC	20	17.3
2	REC & ACC	3	2.5
3	C	2	1.7
4	REC	2	1.7
5	DR	1	0.8

B. RECREATION DIVISION II

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	ACC	9	19.6
2	REC & ACC	1	2.2
3	C	1	2.2
4	REC	1	2.2

C. RECREATION DIVISION III

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	ACC	5	20.8
2	C	1	4.2
3	DR	1	4.2

D. RECREATION DIVISION IV   No Data

E. RECREATION DIVISION V

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	ACC	3	18.8
2	REC & ACC	2	12.5
3	REC	1	6.2

F. RECREATION DIVISION VII No Data

LEGEND

C   Cottages
ACC   Accommodation
REC   Recreation Facilities
DR   Dining Facilities

APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)

123. Type of Renovations Planned (in Rank Order) (cont'd.)

G. RECREATION DIVISION VIII

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	ACC	3	25.0

H. PRE-CAMBRIAN SHIELD

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	ACC	14	20.0
2	C	2	2.8
3	REC	1	1.4
4	REC & ACC	1	1.4
5	DR	1	1.4

I. PENINSULAR ONTARIO

RANK	RENOVATIONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	ACC	6	13.0
2	REC & ACC	2	4.4
3	REC	1	2.2

(Refer to Legend on page 2-58)

124. Planned Renovations - "YES" - Why? (in Rank Order)

A. Total

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	OD	14	12.1
2	PD	9	8.0
3	IB	8	7.2

B. RECREATION DIVISION II

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	OD	6	13.0
2	PD	6	13.0
3	IB	3	6.5

LEGEND

PD   Popular Demand
OD   Outdated
IB   Increased Business

124. Planned Renovations - "YES" - Why? (in Rank Order) (cont'd.)

C. RECREATION DIVISION III

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	OD	5	20.8
2	PD	2	8.4
3	IB	2	8.4

D. RECREATION DIVISION IV   No Data

E. RECREATION DIVISION V

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	OD	4	25.0
2	PD	1	6.2
3	IB	1	6.2

F. RECREATION DIVISION VII

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	IB	1	6.2

G. RECREATION DIVISION VIII

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	OD	2	16.7
2	IB	1	8.4

H. PRE-CAMBRIAN SHIELD

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	OD	11	15.7
2	PD	8	11.4
3	IB	5	6.1

I. PENINSULAR ONTARIO

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	OD	6	13.0
2	IB	3	6.6
3	PD	1	2.2

(Refer to Legend on page 2-59)

APPENDIX 2. PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)

125. Planned Renovations - "NO" - Why? (in Rank Order)

A. Total

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	NN	52	50.0
2	CA	8	7.2
3	NR	8	7.2
4	NP	3	2.6

B. RECREATION DIVISION II

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	NN	21	45.7
2	NR	3	6.6
3	CA	2	4.4
4	NP	2	4.4

C. RECREATION DIVISION III

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	NN	11	45.8
2	NR	3	12.5

D. RECREATION DIVISION IV No Data

E. RECREATION DIVISION V

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	NN	4	25.0
2	CA	2	12.5
3	NP	1	6.2
4	NR	1	6.2

F. RECREATION DIVISION VII

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	NN	8	50.0
2	CA	2	12.5

LEGEND

NN   Not Necessary
NR   Near Retirement
NP   Not Profitable
CA   Cannot Afford

125. Planned Renovations - "NO" - Why? (in Rank Order) (cont'd.)

G. RECREATION DIVISION VIII

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	NN	6	50.0
2	CA	2	16.7
3	NR	1	8.4

H. PRE-CAMBRIAN SHIELD

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	NN	32	45.7
2	NR	6	8.5
3	NP	2	2.8
4	CA	2	2.8

I. PENINSULAR ONTARIO

RANK	REASONS	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	NN	20	43.5
2	CA	6	13.0
3	NR	2	4.4
4	NP	1	2.2

LEGEND

NN Not Necessary

NR Near Retirement

NP Not Profitable

CA Cannot Afford

APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)

126. Installed Facilities

A. Total (116 Resorts)

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	2	98	84.5
2	5	96	82.8
3	4	89	76.6
4	6	71	61.8
5	13	68	58.6
6	18	57	49.7
7	15	50	43.1
8	14	43	37.0
9	8	41	35.3
10	12	34	29.3
11	3	33	28.4
12	17	33	28.4
13	7	24	20.7
14	21	24	20.7
15	23	20	17.3
16	9	19	16.4
17	22	18	15.5
18	1	12	10.4
19	11	11	9.5
20	19	11	9.5
21	16	10	8.6
22	10	9	8.0
23	20	8	7.2

B. RECREATION DIVISION II(46RESORTS)

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	2	44	95.7
2	5	38	82.7
3	4	34	74.0
4	18	26	56.5
5	6	24	52.2
6	13	23	50.0
7	15	20	43.5
8	14	19	41.4
9	18	19	41.4
10	8	19	41.4
11	3	18	39.2
12	7	15	32.6
13	12	15	32.6
14	21	14	30.4
15	9	11	24.0
16	19	9	19.6
17	11	6	13.0
18	20	6	13.0
19	22	6	13.0
20	1	4	8.7
21	10	4	8.7
22	16	4	8.7
23	23	2	4.4

126. Installed Facilities (cont'd.)

C. RECREATION DIVISION III (24 RESORTS)

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	2	24	100.0
2	5	24	100.0
3	4	23	95.8
4	18	16	66.6
5	6	14	58.4
6	13	14	58.4
7	15	14	58.4
8	12	11	45.8
9	14	10	41.7
10	17	9	37.5
11	23	9	37.5
12	8	8	33.3
13	21	7	29.2
14	22	7	29.2
15	3	7	29.2
16	9	4	16.7
17	11	4	16.7
18	16	4	16.7
19	1	2	8.4
20	7	2	8.4
21	10	1	4.2
22	19	0	0
23	20	0	0

D. RECREATION DIVISION IV (2RESORTS)

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	4	2	100.0
2	5	2	100.0
3	6	1	50.0
4	2	1	50.0
5	12	1	50.0
6	13	1	50.0
7	14	1	50.0
8	15	1	50.0
9	23	1	50.0
10	1,3,7,8,9,10,11,16,17, 18,19,20,21,22.	0	0

126. Installed Facilities (cont'd.)

E. RECREATION DIVISION V (16 RESORTS)

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	5	16	100.0
2	2	15	93.8
3	4	13	81.3
4	6	11	68.8
5	13	8	50.0
6	15	8	50.0
7	14	6	38.6
8	18	6	38.6
9	3	5	32.2
10	8	5	32.2
11	12	4	25.0
12	1	3	18.8
13	7	3	18.8
14	9	3	18.8
15	10	2	12.5
16	22	2	12.5
17	17	1	6.2
18	11,16,19,20,21,22.	0	0

F. RECREATION DIVISION VII (16 RESORTS)

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	6	13	81.3
2	13	12	75.0
3	4	9	56.4
4	5	7	43.8
5	8	6	38.6
6	14	5	32.2
7	18	5	32.2
8	2	4	25.0
9	7	4	25.0
10	15	4	25.0
11	1	3	18.8
12	17	3	18.8
13	10	2	12.5
14	16	2	12.5
15	19	2	12.5
16	21	2	12.5
17	23	2	12.5
18-22	3,9,12,20,22.	1	6.2

126. Installed Facilities (cont'd.)

G. RECREATION DIVISION VIII (12 RESORTS)

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	13	10	83.4
2	2	9	75.0
3	5	9	75.0
4	6	8	66.6
5	4	8	66.6
6	18	4	33.3
7	8	3	25.0
8	15	3	25.0
9	3	2	12.5
10	12	2	12.5
11	14	2	12.5
12	22	2	12.5
13	23	2	12.5
14	11	1	8.4
15	17	1	8.4
16	20	1	8.4
17	21	1	8.4
18	1,7,9,10,16,19.	0	0

H. PRE-CAMBRIAN SHIELD (70 RESORTS)

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	2	68	97.7
2	5	62	88.5
3	4	57	81.4
4	18	42	60.0
5	6	38	54.3
6	13	37	52.8
7	15	34	48.6
8	14	29	41.4
9	17	28	40.0
10	8	27	38.5
11	12	26	37.1
12	3	25	35.6
13	21	21	30.0
14	7	17	24.3
15	9	15	21.4
16	22	13	18.5
17	23	11	15.7
18	11	10	14.3
19	19	9	12.8
20	16	8	11.4
21	1	6	8.5
22	20	6	8.5
23	10	5	7.1

APPENDIX 2, PERCENTAGE OCCURRENCE
OF VARIABLES BY RECREATION DIVISION (cont'd.)

126. Installed Facilities (cont'd.)

I. PENINSULAR ONTARIO

RANK	FACILITY NUMBER	NUMBER OF RESORTS	PERCENT OF SAMPLE
1	5	34	74.0
2	6	33	71.8
3	4	32	69.6
4	13	31	67.4
5	2	30	65.2
6	15	16	34.8
7	18	15	32.6
8	8	14	30.4
9	14	14	30.4
10	23	9	19.6
11	3	8	17.4
12	12	8	17.4
13	7	7	15.2
14	1	6	13.0
15	17	5	10.9
16	22	5	10.9
17	9	4	8.7
18	10	4	8.7
19	21	3	6.6
20	16	2	4.4
21	19	2	4.4
22	20	2	4.4
23	11	1	2.2

LEGEND

1	Swimming Pool
2	Dock
3	Swimming Float
4	Boat Ramp
5	Boats Available
6	Sports Field/Playground
7	Tennis Courts
8	Shuffleboard
9	Diving Board/Slide
10	Roped-off Swimming Area
11	Boat Tours
12	Water Skiing
13	Badminton/Volleyball
14	Gift Shop/Store
15	Restaurant/Snack Bar
16	Bar/Convention Facilities
17	Recreation Room
18	Dining Room
19	Golf Course/Driving Range
20	Archery/Riding
21	Recreation Director
22	Marina
23	Campground

APPENDIX 3, VARIABLES INCLUDED IN FACTOR ANALYSIS

RESORT TYPE

1   American Plan
2   American Plan and Housekeeping
3   Housekeeping
4   Lodging and Housekeeping
5   European Plan
6   European Plan and American Plan

FORESHORE

7   Sand Beach Narrow
8   Sand Beach Wide
9   Gravel Beach
10 Cobble Beach
11 Rocky Shore

STAGE OF LIFE

12 Young Unmarried
13 Young Married without Family
14 Married with Young Family
15 Married with Teen Family
16 Older without Family
17 Elderly
18 Groups of Families

PERCENT REPEAT BUSINESS

19   0 -   9 percent
20 10 - 19 percent
21 20 - 29 percent
22 30 - 39 percent
23 40 - 49 percent
24 50 - 59 percent
25 60 - 69 percent
26 70 - 79 percent
27 80 - 89 percent
28 90 - 100 percent

SOCIO-ECONOMIC CLASS

29 Professional
30 White Collar
31 Blue Collar
32 Labourer
33 Professional and White Collar
34 Blue Collar and Labourer

VACATION LENGTH

35 Weekend
36 1 Week
37 2 Weeks
38 3 Weeks
39 Month
40 Season
41 2 - 3 Days not Weekend

TRIP LENGTH

42   75 - 100 mi.
43   101 - 150 mi.
44   151 - 200 mi.
45   201 - 300 mi.
46   301 - 500 mi.
47   500 +   mi.

48   **TOTAL ACCOMMODATION AT RESORT**
49   **AVERAGE COST/UNIT/NIGHT**
50   **POPULATION POTENTIAL OF RESORT AREA**

FACILITIES INSTALLED AT RESORT

51   Boats Available
52   Badminton/Volleyball
53   Gift Shop/Store
54   Water Skiing
55   Recreation Director
56   Camping
57   Swimming Pool
58   Golf/Driving Range
59   Bar or Licensed Dining Room
60   Roped Swim Area

SHORE CHARACTERISTICS

61   Indented Lake Shore
62   Straight Lake Shore

SHORE SITE

63   Headland
64   Bay Head
65   Straight Shore

BACK SHORE

66   Shelving
67   Low Bank
68   High Bank
69   Cliff

70   **AVERAGE DISTANCE TRAVELLED**
71   **MILES OF GRAVEL ROAD TO RESORT (from nearest paved Highway)**

CONSTRUCTION AT RESORT

72   Additions Completed
73   Renovations Completed
74   Additions Planned
75   Renovations Planned

ACCOMMODATION AT RESORT

76   Number of Rooms
77   Number of Motel Units
78   Number of Cottages
79   Number of Cabins

APPENDIX 3, VARIABLES INCLUDED IN FACTOR ANALYSIS (cont'd.)

COMPLAINTS RE HIGHWAYS

80   Width
81   Surface
82   Curves
83   Hills
84   Dust
85   Satisfactory after Construction Completed
86   Signs
87   Traffic Congestion
88   Bad Intersections

89   TOTAL SEASONAL USE

	1	2	3	4	5	6	7	8	9	10
1	1.0000	0.6194	0.4479	0.1641	0.2583	0.4518	0.8096	0.2927	0.0794	0.4238
2	0.6194	1.0000	0.5889	0.0584	-0.1000	0.8370	0.4837	0.1148	0.5661	0.4003
3	0.4479	0.5889	1.0000	0.1026	0.2670	0.4642	0.2375	0.4896	0.6280	0.5079
4	0.1641	0.0584	0.1026	1.0000	0.5904	-0.2349	0.4149	0.3386	-0.2267	0.4206
5	0.2583	-0.1000	0.2670	0.5904	1.0000	-0.0686	0.1731	0.7334	-0.1897	0.5419
6	0.4518	0.8370	0.4642	-0.2349	-0.0686	1.0000	0.2187	0.1307	0.4710	0.2390
7	0.8096	0.4837	0.2375	0.4149	0.1731	0.2187	1.0000	-0.0553	-0.0464	0.3551
8	0.2927	0.1148	0.4896	0.3386	0.7334	0.1307	-0.0553	1.0000	0.0410	0.4067
9	0.0794	0.5661	0.6280	-0.2267	-0.1897	0.4710	-0.0464	0.0410	1.0000	0.1390
10	0.4238	0.4003	0.5079	0.4206	0.5419	0.2390	0.3551	0.4067	0.1390	1.0000
11	0.4885	0.8762	0.5116	-0.0744	-0.2928	0.8306	0.3173	-0.0084	0.4445	0.1133
12	0.0787	0.0000	-0.0501	0.5963	0.1033	-0.2106	0.3561	0.1226	-0.3237	0.2502
13	0.5747	0.0605	0.2369	0.6207	0.7789	-0.0479	0.5195	0.6967	-0.3093	0.4762
14	0.7442	0.7607	0.8060	0.3219	0.2574	0.4510	0.5414	0.4284	0.4899	0.5555
15	0.4821	0.8660	0.5386	-0.1039	-0.0144	0.9506	0.2800	0.1938	0.4781	0.1845
16	0.5133	0.6087	0.4410	-0.0788	-0.2055	0.5922	0.5402	-0.1490	0.4465	0.1067
17	0.0000	-0.0000	0.0000	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	0.0000	-0.0000
18	0.4129	0.8444	0.4509	-0.1985	-0.0580	0.9907	0.2139	0.1246	0.4874	0.2599
19	-0.1118	0.2072	0.2377	0.4932	-0.0478	-0.0465	0.2380	-0.1559	0.1878	-0.1294
20	-0.0340	0.0004	0.3960	0.2440	0.2818	-0.1491	-0.2510	0.6454	0.2289	0.2970
21	0.3073	0.1561	0.4635	0.2317	0.2398	0.0413	0.0953	0.6012	0.1143	0.3784
22	0.2892	0.1559	0.2613	0.4066	0.3591	0.1240	0.4140	0.0811	-0.1651	0.3444
23	0.2508	0.1435	0.5891	0.4236	0.7147	0.0185	0.0766	0.7954	0.3150	0.4167
24	0.7427	0.8627	0.6365	0.1915	0.0493	0.7048	0.6589	0.1739	0.4039	0.2673
25	0.6976	0.6292	0.2760	0.0697	0.1318	0.5635	0.7149	-0.0999	0.0963	0.5721
26	0.6975	0.6289	0.2751	0.0696	0.1313	0.5627	0.7150	-0.1003	0.0958	0.5715
27	0.6439	0.7791	0.5750	0.0663	0.2282	0.8867	0.4392	0.3639	0.2732	0.4219
28	0.1788	-0.4839	-0.3911	0.0787	-0.0368	-0.6527	0.2347	-0.1049	-0.4778	-0.3450
29	0.7946	0.8435	0.6721	0.2352	0.2138	0.6710	0.6216	0.3635	0.3325	0.7185
30	0.7047	0.7430	0.5658	0.3019	0.1862	0.6153	0.7299	0.1982	0.3618	0.2260
31	0.4054	0.3546	0.6623	0.3107	0.4647	0.2399	0.0207	0.7276	0.2476	0.4885
32	0.0000	-0.0000	0.0000	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	0.0000	-0.0000
33	0.4824	0.5401	0.5030	0.3005	0.2734	0.3581	0.3635	0.4790	0.2859	0.0860
34	0.0000	-0.0000	0.0000	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	0.0000	-0.0000
35	0.3218	0.5477	0.3544	0.4226	-0.0740	0.3384	0.2995	0.0643	0.1784	0.1773
36	0.7950	0.7973	0.7563	0.2231	0.4055	0.6872	0.6116	0.4453	0.4405	0.6197
37	0.4776	0.4017	0.2976	0.2813	0.2925	0.2614	0.2977	0.4450	0.0089	0.2659
38	0.0000	-0.0000	0.0000	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	0.0000	-0.0000
39	0.4120	-0.0316	-0.1053	0.4159	0.5608	-0.1103	0.3594	0.5601	-0.3049	0.0039
40	-0.1444	0.1871	0.1879	0.5188	-0.0584	-0.0568	0.2142	-0.1836	0.1650	-0.1580
41	-0.0946	0.1197	0.1074	0.0539	-0.3090	0.0017	-0.0674	0.1491	0.1809	-0.0324
42	0.0221	0.4779	0.1872	0.3331	-0.1246	0.4323	0.1769	-0.1698	0.2602	-0.1167
43	0.2906	0.0288	0.2205	0.7957	0.8454	-0.0806	0.2199	0.7177	-0.1323	0.4775
44	0.6785	0.1596	0.1548	0.4322	0.1660	-0.1248	0.7982	0.1177	-0.3024	0.2207
45	0.5648	0.8324	0.8033	0.0579	0.1266	0.6769	0.2812	0.4870	0.6575	0.5381
46	0.5545	0.7604	0.4780	-0.3131	-0.1350	0.8347	0.3403	-0.0111	0.4142	0.1643
47	0.3146	0.7244	0.4936	-0.2478	-0.1189	0.8074	0.1034	0.0903	0.5319	0.2299
48	0.8445	0.5887	0.4927	0.2868	0.3219	0.4223	0.7848	0.2681	0.0436	0.6348
49	0.3891	0.1897	0.1206	-0.0807	-0.2038	0.0782	0.4578	-0.1179	0.1302	0.1739
50	0.4244	0.8624	0.4963	0.0936	-0.1486	0.8438	0.3779	0.0741	0.4395	0.1089
51	-0.1722	0.2290	-0.1643	0.2561	-0.0430	0.2400	-0.1780	0.1074	0.1223	-0.0084
52	0.7523	0.9296	0.7345	0.2051	0.1336	0.7651	0.6043	0.2595	0.5015	0.4664
53	0.7454	0.7248	0.7411	0.4573	0.4662	0.5037	0.6142	0.6060	0.3551	0.6003
54	0.7483	0.7624	0.7087	0.2648	0.3295	0.6797	0.5919	0.3725	0.3067	0.5673
55	0.6547	0.8038	0.5918	0.2137	0.1332	0.6137	0.5617	0.1584	0.3807	0.6285
56	0.8486	0.7222	0.5336	0.0536	0.1616	0.6301	0.6550	0.2579	0.1935	0.5763
57	0.6629	0.7902	0.4901	-0.1107	-0.1496	0.7556	0.4062	0.1745	0.4081	0.0744
58	0.5173	0.5032	0.1458	0.5208	0.1838	0.3340	0.5498	0.3143	0.0210	-0.0256
59	0.7072	0.0704	-0.0319	0.3702	0.2649	-0.1535	0.8128	0.0815	-0.3556	0.2814
60	0.5486	0.5543	0.4976	0.1316	0.3297	0.6620	0.5190	0.1811	0.1435	0.6715
61	0.4368	0.1749	0.0930	0.5438	0.6762	0.1220	0.5392	0.3047	-0.2598	0.7760
62	0.8361	0.8091	0.7237	0.1292	0.0403	0.6056	0.6991	0.1564	0.3739	0.4208
63	0.5316	0.6338	0.5683	0.4963	0.5540	0.5277	0.3669	0.7292	0.3037	0.5188
64	0.3015	0.4156	0.0624	-0.0946	-0.4744	0.3721	0.2591	-0.1140	0.1143	-0.2790
65	0.7814	0.8656	0.7352	0.1429	0.1063	0.6886	0.6246	0.1835	0.4824	0.5435
66	0.5250	0.4516	0.5481	0.5393	0.6488	0.3223	0.3918	0.7775	0.1301	0.4622
67	0.3496	0.5703	0.7219	0.4397	0.2468	0.3494	0.2288	0.5104	0.4568	0.4617
68	0.8435	0.7624	0.5735	0.3650	0.4175	0.5822	0.6810	0.4622	0.2373	0.5639
69	0.7919	0.7844	0.5347	-0.0924	0.0497	0.7225	0.4711	0.2531	0.3178	0.3966
70	-0.0046	0.0774	0.1961	0.3486	-0.0946	-0.0919	0.2034	-0.1561	0.0471	-0.2559
71	-0.0589	-0.1129	-0.0280	-0.3244	-0.0899	0.0035	-0.1763	-0.2039	-0.0894	-0.2011
72	-0.0517	0.3024	0.1905	-0.2025	-0.1943	0.2450	-0.1782	-0.0679	0.1787	0.1234
73	0.7474	0.8416	0.6020	0.2162	0.1794	0.7597	0.6389	0.1758	0.3337	0.5551
74	0.8225	0.7058	0.4193	0.4563	0.2765	0.5003	0.8946	0.1615	0.1076	0.4186
75	0.8904	0.7776	0.4938	0.1759	0.2890	0.7070	0.7648	0.2403	0.2327	0.5108
76	0.7407	0.8162	0.5528	0.3122	0.1579	0.6032	0.7760	0.0670	0.2987	0.5946
77	0.7188	0.2730	0.1510	0.3714	0.3375	0.0883	0.8850	-0.0321	-0.1703	0.5403
78	0.2241	0.5851	0.4563	-0.0299	-0.1333	0.6905	0.1689	0.1908	0.3039	0.1651
79	0.5406	0.7284	0.6537	0.4498	0.2258	0.5006	0.4238	0.4245	0.2836	0.4880
80	0.2247	0.5246	0.4294	-0.1467	-0.0947	0.4969	0.0401	0.1003	0.4509	0.2219
81	0.7195	0.5411	0.3126	0.2446	0.3914	0.4845	0.4231	0.6131	0.0827	0.2361
82	0.6483	0.6778	0.5108	-0.0827	0.0541	0.5009	0.2878	0.3623	0.3905	0.3527
83	0.5382	0.6690	0.7450	0.0302	0.1362	0.5121	0.3728	0.2171	0.5094	0.7728
84	0.0000	-0.0000	0.0000	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	0.0000	-0.0000
85	0.2181	0.2158	0.3214	0.1438	0.5930	0.4313	-0.0703	0.7556	0.0048	0.2139
86	0.3855	0.8078	0.5809	0.0815	0.0542	0.8266	0.2344	0.2535	0.4798	0.2564
87	0.1192	0.4353	0.4473	0.5434	0.2799	0.3464	0.2412	0.2724	0.2483	0.0462
88	-0.0009	-0.0769	0.2528	0.6848	0.7518	-0.0919	0.0096	0.7109	-0.1035	0.1344
89	0.0000	-0.0000	0.0000	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	0.0000	-0.0000

	11	12	13	14	15	16	17	18	19	20
1	0.4885	0.0787	0.5747	0.7442	0.4821	0.5133	0.0000	0.4129	-0.1118	-0.0340
2	0.8762	0.0000	0.0605	0.7607	0.8660	0.6087	-0.0000	0.8444	0.2072	0.0004
3	0.5116	-0.0501	0.2369	0.8060	0.5386	0.4410	0.0000	0.4509	0.2377	0.3960
4	-0.0744	0.5963	0.6207	0.3219	-0.1039	-0.0788	-0.0000	-0.1985	0.4932	0.2440
5	-0.2928	0.1033	0.7789	0.2574	-0.0144	-0.2055	-0.0000	-0.0580	-0.0478	0.2818
6	0.8306	-0.2106	-0.0479	0.4510	0.9506	0.5922	-0.0000	0.9907	-0.0465	-0.1491
7	0.3173	0.3561	0.5195	0.5414	0.2800	0.5402	0.0000	0.2139	0.2380	-0.2510
8	-0.0084	0.1226	0.6967	0.4284	0.1938	-0.1490	-0.0000	0.1246	-0.1559	0.6454
9	0.4445	-0.3237	-0.3093	0.4899	0.4781	0.4465	0.0000	0.4874	0.1878	0.2289
10	0.1133	0.2502	0.4762	0.5555	0.1845	0.1067	-0.0000	0.2599	-0.1294	0.2970
11	1.0000	-0.0491	-0.1265	0.6164	0.8610	0.6306	0.0000	0.8099	0.2206	-0.0626
12	-0.0491	1.0000	0.4539	-0.0010	-0.1859	0.1704	0.0000	-0.1780	0.2594	0.1181
13	-0.1265	0.4539	1.0000	0.3718	0.0054	0.0387	0.0000	-0.0667	-0.0334	0.2680
14	0.6164	-0.0010	0.3718	1.0000	0.5530	0.3997	-0.0000	0.4412	0.2012	0.3689
15	0.8610	-0.1859	0.0054	0.5530	1.0000	0.5240	0.0000	0.9502	0.1721	-0.0949
16	0.6306	0.1704	0.0387	0.3997	0.5240	1.0000	-0.0000	0.5593	0.1704	-0.3612
17	0.0000	0.0000	0.0000	-0.0000	0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000
18	0.8099	-0.1780	-0.0667	0.4412	0.9502	0.5593	0.0000	1.0000	-0.0198	-0.1260
19	0.2206	0.2594	-0.0334	0.2012	0.1721	0.1704	0.0000	-0.0198	1.0000	-0.1439
20	-0.0626	0.1181	0.2680	0.3689	-0.0949	-0.3612	0.0000	-0.1260	-0.1439	1.0000
21	0.1511	0.3926	0.4460	0.4571	-0.0055	0.1669	-0.0000	0.0349	-0.2905	0.7396
22	0.1241	0.1299	0.4460	0.2251	0.1521	0.2337	-0.0000	0.0597	0.4058	-0.2774
23	-0.0458	0.0588	0.5826	0.5348	0.1495	-0.1213	0.0000	0.0487	0.0780	0.6744
24	0.8033	-0.0006	0.2626	0.7919	0.8147	0.6313	-0.0000	0.6786	0.4010	-0.0838
25	0.4619	0.0981	0.2245	0.4646	0.4976	0.5560	-0.0000	0.5787	-0.1311	-0.3502
26	0.4615	0.0984	0.2244	0.4643	0.4969	0.5557	-0.0000	0.5780	-0.1312	-0.3505
27	0.7433	0.0685	0.3168	0.5696	0.8724	0.6438	0.0000	0.8704	0.0234	-0.0993
28	-0.4361	0.1216	0.2949	-0.1505	-0.6157	-0.1625	-0.0000	-0.7168	-0.1046	-0.0799
29	0.6677	0.2453	0.4266	0.8174	0.6575	0.5844	0.0000	0.6656	-0.0075	0.1433
30	0.6584	0.1711	0.3965	0.6786	0.6925	0.7726	0.0000	0.6052	0.3876	-0.1558
31	0.3514	-0.0457	0.4565	0.7056	0.3107	-0.0338	-0.0000	0.2028	-0.0206	0.6628
32	0.0000	0.0000	0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000
33	0.4467	-0.0006	0.3605	0.6499	0.6036	0.0578	-0.0000	0.3808	0.4033	0.3203
34	0.0000	0.0000	0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000
35	0.6592	0.2269	0.1327	0.5383	0.3817	0.4540	0.0000	0.2860	0.4589	0.0112
36	0.6136	-0.0135	0.4947	0.8474	0.7333	0.5162	-0.0000	0.6784	0.0776	0.1536
37	0.2737	0.1828	0.3134	0.4745	0.3473	0.2111	-0.0000	0.2844	0.0826	-0.0000
38	0.0000	0.0000	0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000
39	-0.2070	0.2680	0.7634	0.1448	-0.0129	-0.1299	0.0000	-0.0932	-0.0769	0.1901
40	0.2268	0.2342	-0.0660	0.1823	0.1573	0.1376	0.0000	-0.0289	0.9910	-0.1270
41	0.1457	0.5316	-0.0158	0.0617	0.0331	0.0342	0.0000	0.0361	0.0353	0.5612
42	0.6222	-0.0549	-0.1865	0.2938	0.5394	0.2932	-0.0000	0.4408	0.6426	-0.1160
43	-0.1040	0.3254	0.7681	0.3830	-0.0230	-0.0877	0.0000	-0.0681	0.0510	0.4268
44	0.0725	0.5662	0.6063	0.3885	-0.0563	0.3628	-0.0000	-0.1445	0.1698	-0.0806
45	0.6656	-0.0439	0.2229	0.8455	0.7250	0.3653	-0.0000	0.6796	0.0455	0.4710
46	0.7958	-0.3195	-0.0594	0.5165	0.8388	0.5260	-0.0000	0.8055	-0.0320	-0.1848
47	0.7112	-0.1824	-0.1663	0.4380	0.7134	0.6526	-0.0000	0.8083	-0.0806	-0.1290
48	0.3899	0.2616	0.5106	0.6727	0.4451	0.4899	0.0000	0.4213	-0.0031	-0.0701
49	0.1045	0.5199	0.2252	0.0981	0.0057	0.5874	-0.0000	0.0498	-0.0862	-0.1652
50	0.9096	0.1183	0.0185	0.5308	0.8970	0.6868	0.0000	0.8417	0.4097	-0.1276
51	0.1989	0.0901	-0.0579	-0.0137	0.2438	-0.1191	0.0000	0.2694	0.1545	0.1926
52	0.8321	-0.0007	0.2657	0.8793	0.8365	0.6384	-0.0000	0.7512	0.2739	0.0284
53	0.5055	0.2297	0.6299	0.8702	0.6160	0.3799	-0.0000	0.5143	0.2293	0.3633
54	0.6661	0.1252	0.4413	0.7617	0.7048	0.6777	0.0000	0.6444	0.1850	-0.0899
55	0.6177	0.1231	0.1784	0.7343	0.6206	0.5802	0.0000	0.6326	0.1469	-0.0877
56	0.5902	0.1724	0.3939	0.6819	0.5702	0.6409	-0.0000	0.6221	-0.2015	-0.0300
57	0.8231	-0.0844	0.1498	0.6146	0.7781	0.6706	0.0000	0.6885	0.1183	-0.1114
58	0.4780	0.4212	0.4793	0.4512	0.4627	0.3770	0.0000	0.3551	0.3403	0.0750
59	-0.0779	0.4847	0.6521	0.2829	-0.1501	0.2815	-0.0000	-0.1603	-0.1370	-0.0931
60	0.4516	0.1539	0.3341	0.4250	0.5850	0.5346	-0.0000	0.6665	-0.0853	-0.1104
61	-0.1092	0.3814	0.6839	0.2318	0.0903	0.0430	0.0000	0.1410	-0.1085	-0.0392
62	0.7606	0.0590	0.2721	0.8565	0.6777	0.6737	-0.0000	0.5737	0.2395	-0.0414
63	0.4430	0.2521	0.6421	0.6842	0.5926	0.2787	-0.0000	0.5460	0.1098	0.4351
64	0.6021	0.1316	-0.1487	0.2660	0.3704	0.4341	-0.0000	0.3596	-0.0155	0.0925
65	0.7524	-0.0013	0.2439	0.8561	0.7101	0.7043	-0.0000	0.6621	0.1897	-0.0615
66	0.2785	0.3109	0.7644	0.6250	0.4582	0.1000	0.0000	0.3400	0.1779	0.4705
67	0.4812	0.1575	0.2747	0.7598	0.4671	0.1944	0.0000	0.3623	0.3506	0.5770
68	0.5786	0.1880	0.5907	0.8071	0.6334	0.5094	-0.0000	0.5829	0.0593	0.0801
69	0.7226	-0.0630	0.2107	0.7054	0.6772	0.6462	-0.0000	0.6958	-0.1919	-0.0872
70	0.2353	0.0965	0.0220	0.1770	0.0740	0.2227	-0.0000	-0.1445	0.8168	-0.2056
71	0.0985	-0.3366	-0.2697	-0.0993	0.0587	-0.1409	0.0000	-0.0087	-0.0738	-0.2217
72	0.3233	-0.2464	-0.3514	0.1940	0.3575	-0.2515	-0.0000	0.2639	0.1070	0.0580
73	0.7594	0.1285	0.2879	0.7265	0.7454	0.7455	0.0000	0.7491	0.1266	-0.1644
74	0.5571	0.2651	0.5144	0.6969	0.6106	0.5085	-0.0000	0.5101	0.3153	-0.1043
75	0.6141	0.0214	0.4317	0.7175	0.7255	0.5925	0.0000	0.7005	-0.0192	-0.1357
76	0.6257	0.0966	0.2785	0.7680	0.6576	0.5372	-0.0000	0.6110	0.2615	-0.1040
77	0.0567	0.3006	0.5239	0.3993	0.0819	0.3535	-0.0000	0.1016	-0.0327	-0.2132
78	0.6685	0.3923	0.0566	0.2731	0.6406	0.6622	0.0000	0.7015	0.0898	0.0604
79	0.6463	0.3096	0.4377	0.7397	0.5924	0.4425	0.0000	0.4730	0.4452	0.1413
80	0.5015	-0.1027	-0.1525	0.4131	0.3962	0.5452	0.0000	0.5022	-0.1126	-0.0211
81	0.4363	0.1695	0.6195	0.5596	0.5087	0.3913	-0.0000	0.4683	-0.1415	0.1204
82	0.5726	-0.1838	0.1651	0.7558	0.5574	0.1558	0.0000	0.5074	-0.2295	0.3868
83	0.4812	-0.0653	0.1326	0.7532	0.4730	0.3471	-0.0000	0.5222	-0.0999	0.3204
84	0.0000	0.0000	0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000
85	0.1494	-0.0543	0.4115	0.2252	0.5019	-0.0425	-0.0000	0.4398	-0.0843	0.1941
86	0.7951	-0.0968	0.1105	0.5714	0.8849	0.4697	-0.0000	0.7988	0.3344	0.0004
87	0.4532	0.1819	0.2491	0.4001	0.5390	0.2798	0.0000	0.3558	0.8113	-0.0000
88	-0.1269	0.2899	0.6391	0.1770	0.0728	-0.1732	-0.0000	-0.0777	0.4092	0.3426
89	0.0000	0.0000	0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000

	21	22	23	24	25	26	27	28	29	30
1	0.3073	0.2892	0.2508	0.7427	0.6976	0.6975	0.6439	0.1788	0.7946	0.7047
2	0.1561	0.1559	0.1435	0.8627	0.6292	0.6289	0.7791	-0.4839	0.8435	0.7430
3	0.4635	0.2613	0.5891	0.6365	0.2760	0.2751	0.5750	-0.3911	0.6721	0.5658
4	0.2317	0.4066	0.4236	0.1915	0.0697	0.0696	0.0663	0.0787	0.2352	0.3019
5	0.2398	0.3591	0.7147	0.0493	0.1318	0.1313	0.2282	-0.0368	0.2138	0.1862
6	0.0413	0.1240	0.0185	0.7048	0.5635	0.5627	0.8867	-0.6527	0.6710	0.6153
7	0.0953	0.4140	0.0766	0.6589	0.7149	0.7150	0.4392	0.2347	0.6216	0.7299
8	0.6012	0.0811	0.7954	0.1739	-0.0999	-0.1003	0.3639	-0.1049	0.3635	0.1982
9	0.1143	-0.1651	0.3150	0.4039	0.0963	0.0958	0.2732	-0.4778	0.3324	0.3618
10	0.3784	0.3444	0.4167	0.2673	0.5721	0.5715	0.4219	-0.3450	0.7185	0.2260
11	0.1511	0.1241	-0.0458	0.8033	0.4619	0.4615	0.7433	-0.4361	0.6677	0.6584
12	0.3926	0.1299	0.0588	-0.0006	0.0981	0.0984	0.0685	0.1216	0.2453	0.1711
13	0.4460	0.4460	0.5826	0.2626	0.2245	0.2244	0.3168	0.2949	0.4266	0.3965
14	0.4571	0.2251	0.5348	0.7919	0.4646	0.4643	0.5696	-0.1505	0.8174	0.6786
15	-0.0055	0.1521	0.1495	0.8147	0.4976	0.4969	0.8724	-0.6157	0.6575	0.6925
16	0.1669	0.2337	-0.1213	0.6313	0.5560	0.5557	0.6438	-0.1625	0.5844	0.7726
17	-0.0000	-0.0000	0.0000	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	0.0000	0.0000
18	0.0349	0.0597	0.0487	0.6786	0.5787	0.5780	0.8704	-0.7168	0.6656	0.6052
19	-0.2905	-0.4058	0.0780	0.4010	-0.1312	-0.1312	0.0234	-0.1046	-0.0075	0.3876
20	0.7396	-0.2774	0.6744	-0.0838	-0.3502	-0.3505	-0.0993	-0.0799	0.1433	-0.1558
21	1.0000	-0.1795	0.4989	0.0845	0.0387	0.0386	0.2189	0.0222	0.4478	0.1980
22	-0.1795	1.0000	-0.0171	0.4387	0.1940	0.1931	0.3287	0.0665	0.2894	0.3609
23	0.4989	-0.0171	1.0000	0.1828	-0.0050	-0.0051	0.1703	-0.1253	0.2842	0.2925
24	0.0845	0.4387	0.1828	1.0000	0.5193	0.5187	0.7856	-0.2151	0.7698	0.8654
25	0.0387	0.1940	-0.0050	0.5193	1.0000	1.0000	0.6236	-0.2568	0.7273	0.5912
26	0.0386	0.1931	-0.0051	0.5187	1.0000	1.0000	0.6227	-0.2558	0.7267	0.5910
27	0.2189	0.3287	0.1703	0.7856	0.6236	0.6227	1.0000	-0.5132	0.8228	0.7441
28	0.0222	0.0665	-0.1253	-0.2151	-0.2568	-0.2558	-0.5132	1.0000	-0.3304	-0.1575
29	0.4478	0.2894	0.2842	0.7698	0.7273	0.7267	0.8228	-0.3304	1.0000	0.6928
30	0.1980	0.3609	0.2925	0.8654	0.5912	0.5910	0.7441	-0.1575	0.6928	1.0000
31	0.5519	0.2535	0.6420	0.4016	-0.0133	-0.0139	0.3743	-0.1232	0.5128	0.2128
32	-0.0000	-0.0000	0.0000	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	0.0000	0.0000
33	0.1332	0.0444	0.6176	0.6766	0.1338	0.1338	0.4280	-0.1273	0.4150	0.5765
34	-0.0000	-0.0000	0.0000	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	0.0000	0.0000
35	0.1966	0.5147	-0.0558	0.6235	0.1163	0.1160	0.4215	-0.0473	0.4816	0.5103
36	0.3199	0.3567	0.5417	0.8147	0.6840	0.6834	0.7888	-0.3198	0.8661	0.7940
37	0.1982	-0.0540	0.2163	0.4248	0.2999	0.3000	0.5008	-0.1188	0.5171	0.4093
38	-0.0000	-0.0000	0.0000	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	0.0000	0.0000
39	0.2479	-0.0370	0.5198	0.1004	0.0552	0.0559	0.0951	0.3761	0.1009	0.3038
40	-0.2898	0.3873	0.0476	0.3800	-0.1601	-0.1603	-0.0003	-0.1083	-0.0432	0.3595
41	0.5183	-0.3894	0.1111	0.0123	-0.2571	-0.2572	0.0157	-0.0964	0.1465	-0.0474
42	-0.1823	0.3110	-0.0923	0.5673	0.0484	0.0478	0.3680	-0.3849	0.1745	0.4698
43	0.4604	0.2519	0.6684	0.1264	0.0490	0.0488	0.2242	0.0388	0.2995	0.2726
44	0.3001	0.3225	0.0350	0.4084	0.3546	0.3547	0.2369	0.4925	0.4600	0.4537
45	0.4534	0.0707	0.5079	0.7273	0.3705	0.3698	0.6750	-0.4537	0.8183	0.5535
46	-0.0172	0.1309	0.0716	0.6954	0.6295	0.6293	0.6833	-0.3698	0.5753	0.6118
47	0.2152	-0.0721	0.0321	0.4939	0.5425	0.5423	0.6904	-0.5958	0.5805	0.5793
48	0.2687	0.3213	0.1803	0.6768	0.7528	0.7524	0.6996	-0.0860	0.8528	0.6272
49	0.2146	0.0754	-0.0896	0.1814	0.3430	0.3432	0.1954	0.2501	0.3749	0.2831
50	0.0812	0.2520	0.0232	0.8426	0.4187	0.4181	0.8228	-0.5192	0.6541	0.7806
51	-0.0615	0.0091	-0.0899	0.1349	-0.2587	-0.2595	0.1790	-0.3435	0.0763	-0.0550
52	0.2208	0.3479	0.3050	0.9496	0.6350	0.6344	0.8299	-0.3574	0.8789	0.8510
53	0.4523	0.3124	0.6385	0.7958	0.4711	0.4706	0.7109	-0.2375	0.8480	0.7477
54	0.2521	0.5196	0.2859	0.8392	0.6524	0.6518	0.8699	-0.2781	0.8719	0.8237
55	0.1706	0.2188	0.1219	0.7212	0.7239	0.7234	0.7456	-0.4280	0.8802	0.6317
56	0.4248	0.1530	0.1575	0.6515	0.8219	0.8216	0.7819	-0.2121	0.9115	0.6609
57	0.1331	0.3081	0.0193	0.8558	0.3596	0.3592	0.7469	-0.1039	0.6665	0.7174
58	0.2897	0.0419	0.3000	0.5910	0.2492	0.2495	0.4873	0.0287	0.4386	0.7228
59	0.3034	0.1468	0.0941	0.2212	0.5093	0.5098	0.1468	0.5396	0.3995	0.3715
60	0.1967	0.4105	0.1231	0.5409	0.7600	0.7589	0.8135	-0.5193	0.7596	0.5356
61	0.0966	0.4610	0.2961	0.1853	0.6019	0.6016	0.3674	-0.0893	0.4965	0.2734
62	0.2361	0.3752	0.1820	0.9115	0.6388	0.6383	0.7412	-0.1388	0.8580	0.7775
63	0.5256	0.1851	0.7070	0.5975	0.3432	0.3429	0.6697	-0.3305	0.6999	0.6824
64	0.3846	-0.2821	-0.2381	0.4136	0.1158	0.1159	0.3299	0.0151	0.2884	0.3907
65	0.2109	0.4035	0.1886	0.8863	0.6813	0.6807	0.7922	-0.2851	0.9033	0.7741
66	0.4758	0.2288	0.8175	0.5179	0.2554	0.2552	0.5252	-0.1582	0.5741	0.5918
67	0.4697	0.2082	0.4846	0.6272	0.0463	0.0453	0.4997	-0.3606	0.6286	0.4280
68	0.3769	0.2433	0.4954	0.7462	0.7265	0.7265	0.7422	-0.1646	0.8569	0.8224
69	0.3268	0.0615	0.1231	0.6879	0.7150	0.7150	0.7785	-0.2224	0.8313	0.6668
70	-0.2470	0.6271	-0.0861	0.4121	-0.2593	-0.2596	-0.0005	0.2239	-0.0700	0.3312
71	-0.2799	-0.1594	0.0211	-0.1403	0.1278	0.1285	-0.1397	0.0093	-0.2356	-0.1347
72	-0.2502	-0.1395	0.0646	0.1544	0.1282	0.1285	0.0581	-0.3416	0.1010	-0.1004
73	0.2178	0.3698	0.1326	0.8209	0.7901	0.7895	0.8897	-0.3939	0.9050	0.8052
74	0.1162	0.3955	0.2571	0.8445	0.7081	0.7078	0.6898	-0.0884	0.7596	0.8311
75	0.1630	0.2879	0.2340	0.8227	0.8282	0.8277	0.8406	-0.2216	0.8598	0.7986
76	0.0865	0.4125	0.1383	0.8553	0.7687	0.7682	0.7190	-0.2963	0.8502	0.7494
77	0.1032	0.3285	0.0818	0.3858	0.7649	0.7648	0.3404	0.1647	0.5584	0.4619
78	0.4431	-0.0004	0.0535	0.4602	0.3446	0.3441	0.7274	-0.5592	0.5720	0.5587
79	0.2677	0.5697	0.3131	0.7839	0.3069	0.3063	0.6696	-0.2325	0.7640	0.6559
80	0.3602	-0.1935	0.0710	0.2775	0.4222	0.4225	0.4264	-0.3909	0.4546	0.4439
81	0.4341	0.0334	0.4385	0.5397	0.4041	0.4043	0.6432	0.0197	0.6245	0.6590
82	0.4053	-0.2623	0.4544	0.5192	0.4704	0.4708	0.4353	-0.1609	0.6401	0.3999
83	0.3933	0.1654	0.3036	0.5351	0.5963	0.5954	0.5443	-0.4559	0.8086	0.3664
84	-0.0000	-0.0000	0.0000	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	0.0000	0.0000
85	0.1615	0.0538	0.4774	0.2913	0.0479	0.0472	0.5960	-0.3843	0.3067	0.2766
86	0.0189	0.4377	0.1980	0.8148	0.3157	0.3149	0.7735	-0.5121	0.6169	0.6688
87	-0.0716	0.5013	0.3485	0.6267	-0.0003	-0.0009	0.4599	-0.3290	0.2684	0.6328
88	0.2090	0.3231	0.6974	0.1316	-0.2593	-0.2596	0.1616	-0.0493	0.0230	0.2749
89	-0.0000	-0.0000	0.0000	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	0.0000	0.0000

	31	32	33	34	35	36	37	38	39	40
1	0.4054	0.0000	0.4824	0.0000	0.3218	0.7950	0.4776	0.0000	0.4120	-0.1444
2	0.3546	-0.0000	0.5401	-0.0000	0.5477	0.7973	0.4017	-0.0000	-0.0316	0.1871
3	0.6623	0.0000	0.5030	0.0000	0.3544	0.7563	0.2976	0.0000	-0.1053	0.1879
4	0.3107	-0.0000	0.3005	-0.0000	0.4226	0.2231	0.2813	-0.0000	0.4159	0.5188
5	0.4647	-0.0000	0.2734	-0.0000	-0.0740	0.4055	0.2925	-0.0000	0.5608	-0.0584
6	0.2399	-0.0000	0.3581	-0.0000	0.3384	0.6872	0.2614	-0.0000	-0.1103	-0.0568
7	0.0207	0.0000	0.3635	0.0000	0.2995	0.6116	0.2977	0.0000	0.3594	0.2142
8	0.7276	-0.0000	0.4790	-0.0000	0.0643	0.4453	0.4450	-0.0000	0.5601	-0.1836
9	0.2476	0.0000	0.2859	0.0000	0.1784	0.4405	0.0089	0.0000	-0.3049	0.1650
10	0.4885	-0.0000	0.0860	-0.0000	0.1773	0.6197	0.2659	-0.0000	0.0039	-0.1580
11	0.3514	0.0000	0.4467	0.0000	0.6592	0.6136	0.2737	0.0000	-0.2070	0.2268
12	-0.0457	0.0000	-0.0006	0.0000	0.2269	-0.0135	0.1828	0.0000	0.2680	0.2342
13	0.4565	0.0000	0.3605	0.0000	0.1327	0.4947	0.3134	0.0000	0.7634	-0.0660
14	0.7056	-0.0000	0.6499	-0.0000	0.5383	0.8474	0.4745	-0.0000	0.1448	0.1823
15	0.3107	0.0000	0.6036	0.0000	0.3817	0.7333	0.3473	0.0000	-0.0129	0.1573
16	-0.0338	-0.0000	0.0578	-0.0000	0.4540	0.5162	0.2111	-0.0000	-0.1299	0.1376
17	-0.0000	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	-0.0000	-0.0000	0.0000	0.0000
18	0.2028	0.0000	0.3808	0.0000	0.2860	0.6784	0.2844	0.0000	-0.0932	-0.0289
19	-0.0206	0.0000	0.4033	0.0000	0.4589	0.0776	0.0826	0.0000	-0.0769	0.9910
20	0.6628	0.0000	0.3203	0.0000	0.0112	0.1536	-0.0000	0.0000	0.1901	-0.1270
21	0.5519	-0.0000	0.1332	-0.0000	0.1966	0.3199	0.1982	-0.0000	0.2479	-0.2898
22	0.2535	-0.0000	0.0444	-0.0000	0.5147	0.3567	-0.0540	-0.0000	-0.0370	0.3873
23	0.6420	0.0000	0.6176	0.0000	-0.0558	0.5417	0.2163	0.0000	0.5198	0.0476
24	0.4016	-0.0000	0.6766	-0.0000	0.6235	0.8147	0.4248	-0.0000	0.1004	0.3800
25	-0.0133	-0.0000	0.1338	-0.0000	0.1163	0.6840	0.2999	-0.0000	0.0552	-0.1601
26	-0.0139	-0.0000	0.1338	-0.0000	0.1160	0.6834	0.3000	-0.0000	0.0559	-0.1603
27	0.3743	0.0000	0.4280	0.0000	0.4215	0.7888	0.5008	0.0000	0.0951	-0.0003
28	-0.1232	-0.0000	-0.1273	-0.0000	-0.0473	-0.3198	-0.1188	-0.0000	0.3761	-0.1083
29	0.5128	0.0000	0.4150	0.0000	0.4816	0.8661	0.5171	0.0000	0.1009	-0.0432
30	0.2128	0.0000	0.5765	0.0000	0.5103	0.7940	0.4093	0.0000	0.3038	0.3595
31	1.0000	-0.0000	0.4697	-0.0000	0.4655	0.5707	0.2395	-0.0000	0.1457	-0.0177
32	-0.0000	0.0000	-0.0000	-0.0000	0.0000	-0.0000	-0.0000	-0.0000	0.0000	0.0000
33	0.4697	-0.0000	1.0000	-0.0000	0.2075	0.6236	0.4057	-0.0000	0.4837	0.3800
34	-0.0000	-0.0000	-0.0000	0.0000	0.0000	-0.0000	-0.0000	-0.0000	0.0000	0.0000
35	0.4655	0.0000	0.2075	0.0000	1.0000	0.3545	0.2270	0.0000	-0.1579	0.4872
36	0.5707	-0.0000	0.6236	-0.0000	0.3545	1.0000	0.3387	-0.0000	0.2494	0.0393
37	0.2395	-0.0000	0.4057	-0.0000	0.2270	0.3387	1.0000	-0.0000	0.3444	0.0552
38	-0.0000	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	-0.0000	-0.0000	0.0000	0.0000
39	0.1457	0.0000	0.4837	0.0000	-0.1579	0.2494	0.3444	0.0000	1.0000	-0.0939
40	-0.0177	0.0000	0.3800	0.0000	0.4872	0.0393	0.0552	0.0000	-0.0939	1.0000
41	0.1062	0.0000	0.2024	0.0000	0.0507	-0.0678	-0.0156	0.0000	0.0130	0.0348
42	0.1425	-0.0000	0.3529	-0.0000	0.6654	0.2348	0.0527	-0.0000	-0.2002	0.7125
43	0.5773	0.0000	0.2934	0.0000	0.2738	0.3598	0.3952	0.0000	0.5928	0.0759
44	0.0863	-0.0000	0.2122	-0.0000	0.2602	0.2899	0.4605	-0.0000	0.4231	0.1370
45	0.6670	-0.0000	0.6351	-0.0000	0.3772	0.8245	0.3441	-0.0000	0.0393	0.0148
46	0.2276	0.0000	0.4438	0.0000	0.2609	0.7235	0.0515	0.0000	-0.1037	-0.0583
47	0.1228	-0.0000	0.1234	-0.0000	0.3194	0.5417	0.3523	-0.0000	-0.1911	-0.0984
48	0.2725	0.0000	0.3625	0.0000	0.2499	0.7155	0.6516	0.0000	0.2242	-0.0424
49	-0.1288	-0.0000	-0.0941	-0.0000	0.0596	0.2107	-0.0062	-0.0000	0.0360	-0.1615
50	0.2423	0.0000	0.5108	0.0000	0.6347	0.6270	0.3288	0.0000	-0.0538	0.4044
51	0.1789	0.0000	0.1210	0.0000	0.3355	-0.0623	0.1157	0.0000	0.0140	0.2209
52	0.5065	0.0000	0.6305	-0.0000	0.6079	0.9088	0.4547	-0.0000	0.0540	0.2510
53	0.6356	-0.0000	0.7499	-0.0000	0.3957	0.8960	0.5157	-0.0000	0.4112	0.1948
54	0.4782	0.0000	0.4366	0.0000	0.5923	0.8587	0.5382	0.0000	0.0863	0.1425
55	0.3121	0.0000	0.3213	0.0000	0.4352	0.7087	0.6880	0.0000	-0.0618	0.1181
56	0.3308	-0.0000	0.2650	-0.0000	0.2815	0.7775	0.5363	-0.0000	0.1743	-0.2389
57	0.3912	0.0000	0.4758	0.0000	0.6427	0.6591	0.3185	0.0000	0.0422	0.0931
58	0.2122	0.0000	0.6446	0.0000	0.4505	0.4514	0.4939	0.0000	0.6448	0.3544
59	-0.0147	-0.0000	0.1048	-0.0000	0.0065	0.3026	0.3101	-0.0000	0.5634	-0.1601
60	0.2330	-0.0000	0.1315	-0.0000	0.1697	0.7137	0.2242	-0.0000	-0.0598	-0.1042
61	0.1497	0.0000	0.0934	0.0000	0.0051	0.4918	0.1888	0.0000	0.3505	-0.1326
62	0.4652	0.0000	0.5285	0.0000	0.5608	0.8228	0.4615	0.0000	-0.0022	0.2032
63	0.6066	0.0000	0.6642	0.0000	0.3814	0.7892	0.4291	0.0000	0.5310	0.0950
64	-0.0087	-0.0000	0.2221	-0.0000	0.3867	0.1181	0.1982	-0.0000	0.0057	0.0352
65	0.4760	-0.0000	0.4240	-0.0000	0.5962	0.8548	0.4836	-0.0000	-0.0640	0.1573
66	0.6231	0.0000	0.7711	0.0000	0.2233	0.7406	0.3558	0.0000	0.6557	0.1431
67	0.7075	0.0000	0.5824	0.0000	0.5400	0.5622	0.4236	0.0000	0.0120	0.3619
68	0.4811	-0.0000	0.5999	-0.0000	0.4042	0.9049	0.5558	-0.0000	0.4534	0.0226
69	0.3767	-0.0000	0.3143	-0.0000	0.3989	0.7380	0.6034	-0.0000	0.1014	-0.2241
70	0.1231	-0.0000	0.2304	0.0000	-0.6527	0.0207	0.0668	-0.0000	-0.1521	-0.8211
71	-0.0127	0.0000	0.0578	0.0000	-0.2185	-0.0152	-0.2339	0.0000	-0.1579	-0.0920
72	0.1486	-0.0000	0.3649	-0.0000	-0.0045	0.1573	0.0087	-0.0000	-0.3251	0.0807
73	0.3647	0.0000	0.3422	0.0000	0.5609	0.8273	0.5233	0.0000	0.0056	0.1076
74	0.2590	-0.0000	0.6411	-0.0000	0.4024	0.7970	0.4350	-0.0000	0.3750	0.3012
75	0.3053	0.0000	0.5130	0.0000	0.3079	0.8803	0.5127	0.0000	0.2767	-0.0409
76	0.2651	-0.0000	0.4822	-0.0000	0.4597	0.8086	0.4385	-0.0000	0.0191	0.2466
77	-0.0100	-0.0000	0.1200	-0.0000	0.0147	0.5113	0.2753	-0.0000	0.3010	-0.0509
78	0.1258	0.0000	0.1985	0.0000	0.3366	0.4327	0.2329	0.0000	-0.0750	0.0667
79	0.6388	0.0000	0.5223	0.0000	0.7878	0.6961	0.4484	0.0000	0.0928	0.4087
80	0.1047	0.0000	-0.0304	0.0000	0.2953	0.3630	0.4001	0.0000	-0.1597	-0.1261
81	0.4444	-0.0000	0.5205	-0.0000	0.3227	0.6406	0.6334	-0.0000	0.6790	-0.1658
82	0.5454	0.0000	0.6197	0.0000	0.1425	0.6922	0.3516	0.0000	0.2295	-0.2499
83	0.5156	-0.0000	0.2423	-0.0000	0.2230	0.7387	0.2046	-0.0000	-0.2370	-0.1220
84	-0.0000	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	-0.0000	-0.0000	0.0000	0.0000
85	0.3775	-0.0000	0.5015	-0.0000	-0.0243	0.3862	0.5948	-0.0000	0.4086	-0.1030
86	0.4478	-0.0000	0.5598	-0.0000	0.6176	0.7117	0.1733	-0.0000	-0.0738	0.3200
87	0.3177	-0.0000	0.6202	-0.0000	0.5838	0.4291	0.2516	0.0000	0.1472	0.8094
88	0.4347	-0.0000	0.4937	-0.0000	0.1825	0.2291	0.2537	-0.0000	0.5660	0.4035
89	-0.0000	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	-0.0000	-0.0000	0.0000	0.0000

	41	42	43	44	45	46	47	48	49	50
1	-0.0946	0.0221	0.2906	0.6785	0.5648	0.5545	0.3146	0.8445	0.3891	0.4244
2	0.1197	0.4779	0.0288	0.1596	0.8324	0.7604	0.7244	0.5887	0.1897	0.8624
3	0.1074	0.1872	0.2205	0.1548	0.8033	0.4780	0.4936	0.4927	0.1206	0.4963
4	0.0539	0.3331	0.7957	0.4322	0.0579	-0.3131	-0.2478	0.2868	-0.0807	0.0936
5	-0.3090	-0.1246	0.8454	0.1660	0.1266	-0.1350	-0.1189	0.3219	-0.2038	-0.1486
6	0.0017	0.4323	-0.0806	-0.1248	0.6769	0.8347	0.8074	0.4223	0.0782	0.8438
7	-0.0674	0.1769	0.2199	0.7982	0.2812	0.3403	0.1034	0.7848	0.4578	0.3779
8	0.1491	-0.1698	0.7177	0.1177	0.4870	-0.0111	0.0903	0.2681	-0.1179	0.0741
9	0.1809	0.2602	-0.1323	-0.3024	0.6575	0.4142	0.5319	0.0436	0.1302	0.4395
10	-0.0324	-0.1167	0.4775	0.2207	0.5381	0.1643	0.2299	0.6348	0.1739	0.1089
11	0.1457	0.6222	-0.1040	0.0725	0.6656	0.7958	0.7112	0.3899	0.1045	0.9096
12	0.5316	-0.0549	0.3254	0.5662	-0.0439	-0.3195	-0.1824	0.2616	0.5199	0.1183
13	-0.0158	-0.1865	0.7681	0.6063	0.2229	-0.0594	-0.1663	0.5106	0.2252	0.0185
14	0.0617	0.2938	0.3930	0.3885	0.8455	0.5165	0.4380	0.6727	0.0981	0.5308
15	0.0331	0.5394	-0.0230	-0.0563	0.7250	0.8388	0.7134	0.4451	0.0057	0.8970
16	0.0342	0.2932	-0.0877	0.3628	0.3653	0.5260	0.6526	0.4899	0.5874	0.6868
17	0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.0000	-0.0000	0.0000	-0.0000	0.0000
18	0.0361	0.4408	-0.0681	-0.1445	0.6796	0.8055	0.8083	0.4213	0.0498	0.8417
19	0.0353	0.6426	0.0510	0.1698	0.0455	-0.0320	-0.0806	-0.0031	-0.0862	0.4097
20	0.5612	-0.1160	0.4268	-0.0806	0.4710	-0.1848	-0.1290	-0.0701	-0.1652	-0.1276
21	0.5183	-0.1823	0.4604	0.3001	0.4534	-0.0172	0.2152	0.2687	0.2146	0.0812
22	-0.3894	0.3110	0.2519	0.3225	0.0707	0.1309	-0.0721	0.3213	0.0754	0.2520
23	0.1111	-0.0923	0.6684	0.0350	0.5079	0.0716	0.0321	0.1803	-0.0896	0.0232
24	0.0123	0.5673	0.1264	0.4084	0.7273	0.6954	0.4939	0.6768	0.1814	0.8426
25	-0.2571	0.0484	0.0490	0.3546	0.3705	0.6295	0.5425	0.7528	0.3430	0.4187
26	-0.2572	0.0478	0.0488	0.3547	0.3698	0.6293	0.5423	0.7524	0.3432	0.4181
27	0.0157	0.3680	0.2242	0.2369	0.6750	0.6833	0.6904	0.6996	0.1954	0.8228
28	-0.0964	-0.3849	0.0388	0.4925	-0.4537	-0.3698	-0.5958	-0.0860	0.2501	-0.5192
29	0.1465	0.1745	0.2995	0.4600	0.8183	0.5753	0.5805	0.8528	0.3749	0.6541
30	-0.0474	0.4698	0.2726	0.4537	0.5535	0.6118	0.5793	0.6272	0.2831	0.7806
31	0.1062	0.1425	0.5773	0.0863	0.6670	0.2276	0.1228	0.2725	-0.1288	0.2423
32	0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.0000	-0.0000	0.0000	-0.0000	0.0000
33	0.2024	0.3529	0.2934	0.2122	0.6351	0.4438	0.1234	0.3625	-0.0941	0.5108
34	0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.0000	-0.0000	0.0000	-0.0000	0.0000
35	0.0507	0.6654	0.2738	0.2602	0.3772	0.2609	0.3194	0.2499	0.0596	0.6347
36	-0.0678	0.2348	0.3598	0.2899	0.8245	0.7235	0.5417	0.7155	0.2107	0.6270
37	-0.0156	0.0527	0.3952	0.4605	0.3441	0.0515	0.3523	0.6516	-0.0062	0.3288
38	0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.0000	-0.0000	0.0000	-0.0000	0.0000
39	0.0130	-0.2002	0.5928	0.4231	0.0393	-0.1037	-0.1911	0.2242	0.0360	-0.0538
40	0.0348	0.7125	0.0759	0.1370	0.0148	-0.0583	-0.0984	-0.0424	-0.1615	0.4044
41	1.0000	0.0030	-0.0555	0.1219	0.3282	-0.1397	-0.1075	-0.0142	0.3695	0.1920
42	0.0030	1.0000	0.1027	-0.0791	0.2338	0.2972	0.2690	0.0320	-0.3515	0.7017
43	-0.0555	0.1027	1.0000	0.2876	0.1931	-0.2332	-0.0758	0.2974	-0.1503	0.0145
44	0.1219	-0.0791	0.2876	1.0000	0.0924	-0.0851	-0.1549	0.7127	0.4934	0.1286
45	0.3282	0.2338	0.1931	0.0924	1.0000	0.6050	0.5361	0.5369	0.1585	0.6340
46	-0.1397	0.2972	-0.2332	-0.0851	0.6050	1.0000	0.6825	0.3636	0.1400	0.6789
47	-0.1075	0.2690	-0.0758	-0.1549	0.5361	0.6825	1.0000	0.3222	0.0429	0.6713
48	-0.0142	0.0320	0.2974	0.7127	0.5369	0.3636	0.3222	1.0000	0.3687	0.4158
49	0.3695	-0.3515	-0.1503	0.4934	0.1585	0.1400	0.0429	0.3687	1.0000	0.1429
50	0.1920	0.7017	0.0145	0.1286	0.6340	0.6789	0.6713	0.4158	0.1429	1.0000
51	0.3529	0.5206	0.2372	-0.1728	0.2054	-0.1854	-0.0506	-0.0925	-0.2413	0.3411
52	0.0013	0.4897	0.2167	0.3100	0.8304	0.7514	0.6392	0.7085	0.1834	0.8246
53	0.1944	0.2569	0.5254	0.4756	0.8376	0.4356	0.3367	0.7504	0.1894	0.5961
54	-0.1390	0.3051	0.3420	0.4011	0.6753	0.6256	0.6221	0.7781	0.2889	0.7052
55	-0.0399	0.2738	0.2072	0.4115	0.6623	0.4506	0.6108	0.8453	0.2211	0.6225
56	-0.0004	0.0070	0.2003	0.5383	0.6255	0.5693	0.6162	0.8636	0.3974	0.5393
57	0.0719	0.3941	-0.0189	0.2370	0.6672	0.7284	0.5710	0.4576	0.3196	0.7978
58	0.2530	0.4678	0.4856	0.4839	0.3387	0.2292	0.2312	0.3888	-.1099	0.6209
59	0.0154	-0.2787	0.3379	0.8828	0.0004	-0.0441	-0.1689	0.6564	0.5218	-0.0631
60	-0.0468	0.1847	0.2027	0.2710	0.4979	0.5096	0.4666	0.7384	0.2647	0.5241
61	-0.1734	-0.1386	0.5364	0.3410	0.1765	0.0842	-0.0296	0.5964	0.2350	0.0169
62	0.0058	0.3334	0.1039	0.5405	0.7213	0.6672	0.4921	0.7993	0.3403	0.6977
63	0.1955	0.2682	0.6700	0.1910	0.7357	0.3878	0.4370	0.4765	0.0471	0.5733
64	0.4935	0.4182	-0.1432	0.2563	0.2799	0.3015	0.3579	0.2047	0.1137	0.5250
65	-0.0863	0.3540	0.1737	0.4079	0.7612	0.6568	0.6203	0.7860	0.2942	0.7156
66	0.1871	0.1216	0.6663	0.2861	0.6276	0.3175	0.1714	0.4401	0.0647	0.4082
67	0.4173	0.4750	0.4419	0.2452	0.7804	0.1465	0.2048	0.4746	-0.0597	0.5321
68	-0.0818	0.1694	0.4837	0.4474	0.6835	0.6095	0.5556	0.7497	0.2431	0.5915
69	-0.1231	0.0960	0.1280	0.3312	0.6439	0.6909	0.7774	0.7080	0.2587	0.6084
70	-0.1147	0.5960	0.0241	0.2218	-0.0512	0.0045	-0.1593	-0.0687	-0.0357	0.3214
71	-0.3822	-0.1278	-0.2856	-0.3240	-0.1938	0.4008	0.0489	-0.2565	-0.1289	-0.1266
72	0.0219	0.0697	-0.3392	-0.3906	0.3122	0.4793	0.1503	-0.0331	-0.1652	0.1489
73	-0.1013	0.3962	0.2630	0.3942	0.6497	0.6485	0.6928	0.8023	0.2796	0.7693
74	0.0077	0.4111	0.3347	0.6249	0.5438	0.5223	0.2657	0.8140	0.2615	0.6412
75	-0.1181	0.2491	0.2736	0.4632	0.6486	0.6789	0.5238	0.8733	0.2677	0.6319
76	-0.0490	0.4221	0.1739	0.4546	0.6666	0.5854	0.4553	0.8501	0.1961	0.6497
77	-0.1737	-0.0706	0.2788	0.7338	0.1522	0.1597	-0.0020	0.8093	0.3848	0.0893
78	0.4639	0.3026	-0.0077	0.1042	0.4967	0.4670	0.6756	0.3261	0.3406	0.7696
79	0.1025	0.4253	0.3853	0.3707	0.6929	0.4038	0.3815	0.5411	0.2050	0.7128
80	-0.1353	0.1054	0.0226	-0.0789	0.3750	0.4168	0.9067	0.2399	0.0071	0.4136
81	0.0010	0.0419	0.5472	0.3914	0.5006	0.3925	0.4660	0.5227	0.1890	0.4779
82	0.1314	-0.0096	0.1140	0.0942	0.7639	0.6634	0.4667	0.4422	0.0586	0.3649
83	0.1018	0.0798	0.0976	0.1719	0.7958	0.4879	0.4604	0.6541	0.1665	0.3737
84	0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.0000	-0.0000	0.0000	-0.0000	0.0000
85	0.0030	0.0668	0.4653	-0.0430	0.3799	0.1818	0.2682	0.3299	-0.2367	0.3044
86	0.0406	0.6121	0.0856	-0.0904	0.7257	0.7374	0.5821	0.3191	0.0239	0.8631
87	0.0029	0.7487	0.3700	0.0925	0.3418	0.2381	0.1995	0.1565	-0.1731	0.6778
88	0.0023	0.2146	0.7677	0.0893	0.1031	-0.1985	-0.1593	0.0127	-0.2491	0.1137
89	0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.0000	-0.0000	0.0000	-0.0000	0.0000

	51	52	53	54	55	56	57	58	59	60
1	-0.1722	0.7523	0.7454	0.7483	0.6547	0.8486	0.6629	0.5173	0.7072	0.5486
2	0.2290	0.9296	0.7248	0.7624	0.8038	0.7222	0.7902	0.5032	0.0704	0.5543
3	-0.1643	0.7345	0.7411	0.7087	0.5918	0.5336	0.4901	0.1458	-0.0319	0.4976
4	0.2561	0.2051	0.4573	0.2648	0.2137	0.0536	-0.1107	0.5208	0.3702	0.1316
5	-0.0430	0.1336	0.4662	0.3295	0.1332	0.1616	-0.1496	0.1838	0.2649	0.3297
6	0.2400	0.7651	0.5037	0.6797	0.6137	0.6301	0.7556	0.3340	-0.1535	0.6620
7	-0.1780	0.6043	0.6142	0.5919	0.5617	0.6550	0.4062	0.5498	0.8128	0.5190
8	0.1074	0.2595	0.6060	0.3725	0.1584	0.2579	0.1745	0.3143	0.0815	0.1811
9	0.1223	0.5015	0.3551	0.3067	0.3807	0.1935	0.4081	0.0210	-0.3556	0.1435
10	-0.0084	0.4664	0.6003	0.5673	0.6285	0.5763	0.0744	-0.0256	0.2814	0.6715
11	0.1989	0.8321	0.5055	0.6661	0.6177	0.5902	0.8231	0.4780	-0.0779	0.4516
12	0.0901	-0.0007	0.2297	0.1252	0.1231	0.1724	-0.0844	0.4212	0.4847	0.1539
13	-0.0579	0.2657	0.6299	0.4413	0.1784	0.3939	0.1498	0.4793	0.6521	0.3341
14	-0.0137	0.8793	0.8702	0.7617	0.7343	0.6819	0.6146	0.4512	0.2829	0.4250
15	0.2438	0.8365	0.6160	0.7048	0.6206	0.5702	0.7781	0.4627	-0.1501	0.5850
16	-0.1191	0.6384	0.3799	0.6777	0.5802	0.6409	0.6706	0.3770	0.2815	0.5346
17	0.0000	-0.0000	-0.0000	0.0000	0.0000	-0.0000	0.0000	0.0000	-0.0000	-0.0000
18	0.2694	0.7512	0.5143	0.6444	0.6326	0.6221	0.6885	0.3551	-0.1603	0.6665
19	0.1545	0.2739	0.2293	0.1850	0.1469	-0.2015	0.1183	0.3403	-0.1370	-0.0853
20	0.1926	0.0284	0.3633	-0.0899	-0.0877	-0.0300	-0.1114	0.0750	-0.0931	-0.1104
21	-0.0615	0.2208	0.4523	0.2521	0.1706	0.4248	0.1331	0.2897	0.3034	0.1967
22	0.0091	0.3479	0.3124	0.5196	0.2188	0.1530	0.3081	0.0419	0.1468	0.4105
23	-0.0899	0.3050	0.6385	0.2859	0.1219	0.1575	0.0193	0.3000	0.0941	0.1231
24	0.1349	0.9496	0.7958	0.8392	0.7212	0.6515	0.8558	0.5910	0.2212	0.5409
25	-0.2587	0.6350	0.4711	0.6524	0.7239	0.8219	0.3596	0.2492	0.5093	0.7600
26	-0.2595	0.6344	0.4706	0.6518	0.7234	0.8216	0.3592	0.2495	0.5098	0.7589
27	0.1790	0.8299	0.7109	0.8699	0.7456	0.7819	0.7469	0.4873	0.1468	0.8135
28	-0.3435	-0.3574	-0.2375	-0.2781	-0.4280	-0.2121	-0.1039	0.0287	0.5396	-0.5193
29	0.0763	0.8789	0.8480	0.8719	0.8802	0.9115	0.6665	0.4386	0.3995	0.7596
30	-0.0550	0.8510	0.7477	0.8237	0.6317	0.6609	0.7174	0.7228	0.3715	0.5356
31	0.1789	0.5065	0.6356	0.4782	0.3121	0.3308	0.3912	0.2122	-0.0147	0.2330
32	0.0000	-0.0000	-0.0000	0.0000	0.0000	-0.0000	0.0000	0.0000	-0.0000	-0.0000
33	0.1210	0.6305	0.7499	0.4366	0.3213	0.2650	0.4758	0.6446	0.1048	0.1315
34	0.0000	-0.0000	-0.0000	0.0000	0.0000	-0.0000	0.0000	0.0000	-0.0000	-0.0000
35	0.3355	0.6079	0.3957	0.5923	0.4352	0.2815	0.6427	0.4505	0.0065	0.1697
36	-0.0623	0.9088	0.8960	0.8587	0.7087	0.7775	0.6591	0.4514	0.3026	0.7137
37	0.1157	0.4547	0.5157	0.5382	0.6880	0.5363	0.3185	0.4939	0.3101	0.2242
38	0.0000	-0.0000	-0.0000	0.0000	0.0000	-0.0000	0.0000	0.0000	-0.0000	-0.0000
39	0.0140	0.0540	0.4112	0.0863	-0.0618	0.1743	0.0422	0.6448	0.5634	-0.0598
40	0.2209	0.2510	0.1948	0.1425	0.1181	-0.2389	0.0931	0.3544	-0.1601	-0.1042
41	0.3529	0.0013	0.1944	-0.1339	-0.0399	-0.0004	0.0719	0.2530	0.0154	-0.0468
42	0.5206	0.4897	0.2569	0.3051	0.2738	0.0070	0.3941	0.4678	-0.2787	0.1847
43	0.2372	0.2167	0.5254	0.3420	0.2072	0.2003	-0.0189	0.4856	0.3379	0.2027
44	-0.1728	0.3100	0.4756	0.4011	0.4115	0.5383	0.2370	0.4839	0.8828	0.2710
45	0.2054	0.8304	0.8376	0.6753	0.6623	0.6255	0.6672	0.3387	0.0004	0.4979
46	-0.1854	0.7514	0.4356	0.6256	0.4506	0.5693	0.7284	0.2292	-0.0441	0.5096
47	-0.0506	0.6392	0.3367	0.6221	0.6108	0.6162	0.5710	0.2312	-0.1689	0.4666
48	-0.0925	0.7085	0.7504	0.7781	0.8453	0.8636	0.4576	0.3888	0.6564	0.7384
49	-0.2413	0.1834	0.1894	0.2889	0.2211	0.3974	0.3196	0.1099	0.5218	0.2647
50	0.3411	0.8246	0.5961	0.7052	0.6225	0.5393	0.7978	0.6209	-0.0631	0.5241
51	1.0000	0.0866	0.1406	-0.0550	0.1138	-0.1218	0.1563	0.3145	-0.2761	0.0195
52	0.0866	1.0000	0.8416	0.9031	0.8187	0.7540	0.8142	0.5360	0.1924	0.6291
53	0.1406	0.8416	1.0000	0.7786	0.7019	0.6993	0.5749	0.6165	0.3822	0.5903
54	-0.0550	0.9031	0.7786	1.0000	0.8082	0.7772	0.7542	0.4397	0.2783	0.7084
55	0.1138	0.8187	0.7019	0.8082	1.0000	0.8309	0.5330	0.3521	0.2974	0.6875
56	-0.1218	0.7540	0.6993	0.7772	0.8309	1.0000	0.5777	0.4101	0.5545	0.7552
57	0.1563	0.8142	0.5749	0.7542	0.5330	0.5777	1.0000	0.4888	0.0860	0.3625
58	0.3145	0.5360	-.6165	0.4397	0.3521	0.4101	0.4888	1.0000	0.4313	0.1716
59	-0.2761	0.1924	0.3822	0.2783	0.2974	0.5545	0.0860	0.4313	1.0000	0.2916
60	0.0195	0.6291	0.5903	0.7084	0.6875	0.7552	0.3625	0.1716	0.2916	1.0000
61	-0.0290	0.2791	0.4677	0.4577	0.3771	0.4198	-0.0149	0.1563	0.5102	0.6298
62	-0.0957	0.9236	0.7741	0.8614	0.8151	0.8082	0.7707	0.4354	0.3795	0.6119
63	0.2546	0.6968	0.8647	0.6720	0.4888	0.5365	0.5001	0.6883	0.1959	0.4624
64	0.2212	0.3483	0.1906	0.1735	0.2020	0.3226	0.4910	0.5374	0.1646	0.0759
65	0.0086	0.9482	0.7707	0.9156	0.8969	0.8255	0.7699	0.3764	0.2781	0.6714
66	0.0706	0.5775	0.8494	0.5650	0.3243	0.4275	0.3621	0.6437	0.2849	0.3718
67	0.4539	0.6559	0.7790	0.5339	0.5802	0.3712	0.4260	0.4040	-0.0051	0.3719
68	-0.0847	0.8506	0.8543	0.8471	0.7304	0.8262	0.6219	0.6544	0.4865	0.5822
69	-0.1138	0.7985	0.6031	0.8022	0.7992	0.9055	0.7335	0.4088	0.3221	0.5538
70	0.0622	0.2342	0.0972	0.2307	-0.0186	-0.2391	0.3143	0.2150	-0.1088	-0.1688
71	-0.5693	-0.0693	-0.2875	-0.0973	-0.2217	-0.1127	-0.0926	-0.2416	-0.1900	-0.1358
72	-0.1315	0.2314	0.0449	0.0914	0.1140	-0.0613	0.1273	-0.2057	-0.4191	-0.0370
73	0.0626	0.9060	0.7256	0.9229	0.9042	0.8752	0.7011	0.4824	0.3261	0.7962
74	0.0653	0.8150	0.8187	0.7376	0.6951	0.7084	0.5657	0.6988	0.5908	0.6435
75	0.0003	0.8649	0.7877	0.8401	0.8021	0.8652	0.6675	0.5321	0.5001	0.7658
76	0.0630	0.8823	0.7714	0.8089	0.8561	0.7420	0.5835	0.4189	0.3776	0.7216
77	-0.2308	0.3978	0.4912	0.4498	0.5495	0.6616	0.0918	0.2795	0.8501	0.6269
78	0.1397	0.5188	0.4248	0.5263	0.4426	0.5435	0.5077	0.4386	-0.0201	0.5695
79	0.2445	0.8050	0.7726	0.8190	0.6612	0.5375	0.7109	0.5064	0.1172	0.4293
80	-0.1948	0.4573	0.2127	0.4816	0.5268	0.5287	0.3542	0.1660	-0.0815	0.2371
81	0.0845	0.5963	0.6681	0.6381	0.4743	0.6631	0.6153	0.7537	0.4397	0.2965
82	-0.1061	0.6556	0.6180	0.4559	0.4900	0.6166	0.5096	0.3453	0.1849	0.2413
83	-0.0218	0.6899	0.6634	0.5957	0.7420	0.7146	0.3546	-0.0202	0.1494	0.7008
84	0.0000	-0.0000	-0.0000	0.0000	0.0000	-0.0000	0.0000	0.0000	-0.0000	-0.0000
85	0.2283	0.3161	0.4759	0.4362	0.2730	0.2345	0.2691	0.3296	-0.1042	0.3358
86	0.3088	0.8202	0.6202	0.7376	0.4972	0.3899	0.8141	0.3993	-0.2501	0.4839
87	0.3135	0.5519	0.5345	0.5116	0.2933	0.0476	0.4135	0.5785	-0.1690	0.2120
88	0.1806	0.1164	0.4252	0.2307	-0.0665	-0.1380	-0.0191	0.4606	-0.0060	0.0103
89	0.0000	-0.0000	-0.0000	0.0000	0.0000	-0.0000	0.0000	0.0000	-0.0000	-0.0000

	61	62	63	64	65	66	67	68	69	70
1	0.4368	0.8361	0.5316	0.3015	0.7814	0.5250	0.3496	0.8435	0.7919	-0.0046
2	0.1749	0.8091	0.6338	0.4156	0.8656	0.4516	0.5703	0.7624	0.7844	0.0774
3	0.0930	0.7237	0.5683	0.0624	0.7352	0.5481	0.7219	0.5735	0.5347	0.1961
4	0.5438	0.1292	0.4963	-0.0946	0.1429	0.5393	0.4397	0.3650	-0.0924	0.3486
5	0.6762	0.0403	0.5540	-0.4744	0.1063	0.6488	0.2468	0.4175	0.0497	-0.0946
6	0.1220	0.6056	0.5277	0.3721	0.6886	0.3223	0.3494	0.5822	0.7225	-0.0919
7	0.5392	0.6991	0.3669	0.2591	0.6246	0.3918	0.2288	0.6810	0.4711	0.2034
8	0.3047	0.1564	0.7292	-0.1140	0.1835	0.7775	0.5104	0.4622	0.2531	-0.1561
9	-0.2598	0.3739	0.3037	0.1143	0.4824	0.1301	0.4568	0.2373	0.3178	0.0471
10	0.7760	0.4208	0.5188	-0.2790	0.5435	0.4622	0.4617	0.5639	0.3966	-0.2559
11	-0.1092	0.7606	0.4430	0.6021	0.7524	0.2785	0.4812	0.5786	0.7226	0.2353
12	0.3814	0.0590	0.2521	0.1316	-0.0013	0.3109	0.1575	0.1880	-0.0630	0.0965
13	0.6839	0.2721	0.6421	-0.1487	0.2439	0.7644	0.2747	0.5907	0.2107	0.0220
14	0.2318	0.8565	0.6842	0.2660	0.8561	0.6250	0.7598	0.8071	0.7054	0.1770
15	0.0903	0.6777	0.5926	0.3704	0.7101	0.4582	0.4671	0.6334	0.6772	0.0740
16	0.0430	0.6737	0.2787	0.4341	0.7043	0.1000	0.1944	0.5094	0.6462	0.2227
17	0.0000	0.0000	0.0000	-0.0000	-0.0000	0.0000	0.0000	-0.0000	-0.0000	-0.0000
18	0.1410	0.5737	0.5460	0.3596	0.6621	0.3400	0.3623	0.5829	0.6958	-0.1445
19	-0.1085	0.2395	0.1098	-0.0155	0.1897	0.1779	0.3506	0.0593	-0.1919	0.8168
20	-0.0392	-0.0414	-0.4351	0.0925	-0.0615	0.4705	0.5770	0.0801	-0.0872	-0.2056
21	0.0966	0.2361	0.5256	0.3846	0.2109	0.4758	0.4697	0.3769	0.3268	-0.2470
22	0.4610	0.3752	0.1851	-0.2821	0.4035	0.2288	0.2082	0.2433	0.0615	0.6271
23	0.2961	0.1820	0.7070	-0.2381	0.1886	0.8175	0.4846	0.4954	0.1231	-0.0861
24	0.1853	0.9115	0.5975	0.4136	0.8863	0.5179	0.6272	0.7462	0.6879	0.4121
25	0.6019	0.6388	0.3432	0.1158	0.6813	0.2554	0.0463	0.7265	0.7150	-0.2593
26	0.6016	0.6383	0.3429	0.1159	0.6807	0.2552	0.0453	0.7265	0.7150	-0.2596
27	0.3674	0.7412	0.6697	0.3299	0.7922	0.5252	0.4997	0.7422	0.7785	-0.0005
28	-0.0893	-0.1388	-0.3305	0.0151	-0.2851	-0.1582	-0.3606	-0.1646	-0.2224	0.2239
29	0.4965	0.8580	0.6999	0.2884	0.9033	0.5741	0.6286	0.8569	0.8313	-0.0700
30	0.2734	0.7775	0.6824	0.3907	0.7741	0.5918	0.4280	0.8224	0.6668	0.3312
31	0.1497	0.4652	0.6066	-0.0087	0.4760	0.6231	0.7075	0.4811	0.3767	0.1231
32	0.0000	0.0000	0.0000	-0.0000	-0.0000	0.0000	0.0000	-0.0000	-0.0000	-0.0000
33	0.0934	0.5285	0.6642	0.2221	0.4240	0.7711	0.5824	0.5999	0.3143	0.2304
34	0.0000	0.0000	0.0000	-0.0000	-0.0000	0.0000	0.0000	-0.0000	-0.0000	-0.0000
35	0.0051	0.5608	0.3814	0.3867	0.5962	0.2233	0.5400	0.4042	0.3989	0.6527
36	0.4918	0.8228	0.7892	0.1181	0.8548	0.7406	0.5622	0.9049	0.7380	0.0207
37	0.1888	0.4615	0.4291	0.1982	0.4836	0.3558	0.4236	0.5558	0.6034	-0.0668
38	0.0000	0.0000	0.0000	-0.0000	-0.0000	0.0000	0.0000	-0.0000	-0.0000	-0.0000
39	0.3505	-0.0022	0.5310	0.0057	-0.0640	0.6557	0.0120	0.4534	0.1014	-0.1521
40	-0.1326	0.2032	0.0950	0.0352	0.1573	0.1431	0.3619	0.0226	-0.2241	0.8211
41	-0.1734	0.0058	0.1955	0.4935	-0.0863	0.1871	0.4173	-0.0818	-0.1231	-0.1147
42	-0.1386	0.3334	0.2682	0.4182	0.3540	0.1216	0.4750	0.1694	0.0960	0.5960
43	0.5364	0.1039	0.6700	-0.1432	0.1737	0.6663	0.4419	0.4837	0.1280	0.0241
44	0.3410	0.5405	0.1910	0.2563	0.4079	0.2861	0.2452	0.4474	0.3312	0.2218
45	0.1765	0.7213	0.7357	0.2799	0.7612	0.6276	0.7804	0.6835	0.6439	-0.0512
46	0.0842	0.6672	0.3878	0.3015	0.6568	0.3175	0.1465	0.6095	0.6909	0.0045
47	-0.0296	0.4921	0.4370	0.3579	0.6203	0.1714	0.2048	0.5556	0.7774	-0.1593
48	0.5964	0.7993	0.4765	0.2047	0.7860	0.4401	0.4746	0.7497	0.7080	-0.0687
49	0.2350	0.3403	0.0471	0.1137	0.2942	0.0647	-0.0597	0.2431	0.2587	-0.0357
50	0.0169	0.6977	0.5733	0.5250	0.7156	0.4082	0.5321	0.5915	0.6084	0.3214
51	-0.0290	-0.0957	0.2546	0.2212	0.0086	0.0706	0.4539	-0.0847	-0.1138	0.0622
52	0.2791	0.9236	0.6968	0.3483	0.9482	0.5775	0.6559	0.8506	0.7985	0.2342
53	0.4677	0.7741	0.8647	0.1906	0.7707	0.8494	0.7790	0.8543	0.6031	0.0972
54	0.4577	0.8614	0.6720	0.1735	0.9156	0.5650	0.5339	0.8471	0.8022	0.2307
55	0.3771	0.8151	0.4888	0.2020	0.8969	0.3243	0.5802	0.7304	0.7992	-0.0186
56	0.4198	0.8082	0.5365	0.3226	0.8255	0.4275	0.3712	0.8262	0.9055	-0.2391
57	-0.0149	0.7707	0.5001	0.4910	0.7699	0.3621	0.4260	0.6219	0.7335	0.3143
58	0.1563	0.4354	0.6883	0.5374	0.3764	0.6437	0.4040	0.6544	0.4088	0.2150
59	0.5102	0.3795	0.1959	0.1646	0.2781	0.2849	-0.0051	0.4865	0.3221	-0.1088
60	0.6298	0.6119	0.4624	0.0759	0.6714	0.3718	0.3719	0.5822	0.5538	-0.1688
61	1.0000	0.2160	0.4683	-0.3315	0.2935	0.4934	0.1162	0.5227	0.1889	-0.2147
62	0.2160	1.0000	0.4821	0.3526	0.9545	0.4359	0.5897	0.7707	0.7987	0.2788
63	0.4683	0.4821	1.0000	0.1851	0.5462	0.9178	0.6334	0.8213	0.5168	-0.0306
64	-0.3315	0.3526	0.1851	1.0000	0.2564	0.0165	0.2971	0.1993	0.3746	0.0570
65	0.2935	0.9545	0.5462	0.2564	1.0000	0.4124	0.6043	0.7954	0.8423	0.2063
66	0.4934	0.4359	0.9178	0.0165	0.4124	1.0000	0.5497	0.7634	0.3557	0.0331
67	0.1162	0.5897	0.6334	0.2971	0.6043	0.5497	1.0000	0.4432	0.3249	0.2558
68	0.5227	0.7707	0.8213	0.1993	0.7954	0.7634	0.4432	1.0000	0.8186	-0.0278
69	0.1889	0.7987	0.5168	0.3746	0.8423	0.3557	0.3249	0.8186	1.0000	-0.1524
70	-0.2147	0.2788	-0.0306	0.0570	0.2063	0.0331	0.2558	-0.0278	-0.1524	1.0000
71	-0.1744	-0.0187	-0.2733	-0.2485	-0.1139	-0.0888	-0.4580	-0.0127	0.0426	-0.0344
72	-0.0353	0.1573	-0.0002	-0.1028	0.1186	0.0805	0.0668	0.0838	0.0996	-0.0247
73	0.4184	0.8720	0.5983	0.2989	0.9369	0.4335	0.5052	0.8329	0.8588	0.0864
74	0.5340	0.8035	0.6229	0.3129	0.7509	0.6184	0.4904	0.8188	0.5815	0.2005
75	0.5347	0.8320	0.6317	0.2962	0.8491	0.5381	0.4267	0.8736	0.8098	-0.0662
76	0.5099	0.8509	0.5370	0.2792	0.8747	0.4311	0.5738	0.7542	0.6569	0.1502
77	0.6934	0.5308	0.2257	0.0221	0.4957	0.2646	0.1235	0.5557	0.3880	-0.1111
78	0.0343	0.4394	0.5018	0.5209	0.4491	0.3536	0.3679	0.4285	0.5006	-0.0389
79	0.2944	0.7459	0.6857	0.1254	0.7790	0.6262	0.6978	0.6991	0.5659	0.4610
80	-0.1061	0.3579	0.3322	0.3110	0.4881	0.0747	0.1338	0.4740	0.7008	-0.1800
81	0.2939	0.5049	0.7775	0.3005	0.5268	0.6997	0.3008	0.8358	0.7403	-0.1237
82	0.0906	0.6019	0.5545	0.3111	0.5688	0.5288	0.3930	0.7067	0.7099	-0.3007
83	0.3462	0.6978	0.4290	0.0889	0.7584	0.3274	0.6209	0.5525	0.5938	-0.1976
84	0.0000	0.0000	0.0000	-0.0000	-0.0000	0.0000	0.0000	-0.0000	-0.0000	-0.0000
85	0.2919	0.1558	0.6005	-0.0115	0.2010	0.5846	0.3798	0.3913	0.2985	-0.1668
86	0.1515	0.6264	0.6432	0.2466	0.6876	0.5120	0.5497	0.5726	0.5111	0.3531
87	0.0899	0.3933	0.5563	0.0716	0.3966	0.5559	0.5522	0.3909	0.1015	0.6900
88	0.2934	-0.0348	0.6003	-0.2470	-0.0304	0.7150	0.3694	0.2785	-0.1524	0.3239
89	0.0000	0.0000	0.0000	-0.0000	-0.0000	0.0000	0.0000	-0.0000	-0.0000	-0.0000

	71	72	73	74	75	76	77	78	79	80
1	-0.0589	-0.0517	0.7474	0.8225	0.8904	0.7407	0.7188	0.2241	0.5406	0.2247
2	-0.1129	0.3024	0.8416	0.7058	0.7776	0.8162	0.2730	0.5851	0.7284	0.5246
3	-0.0280	0.1905	0.6020	0.4193	0.4938	0.5528	0.1510	0.4563	0.6537	0.4294
4	-0.3244	-0.2025	0.2162	0.4563	0.1759	0.3122	0.3714	-0.0299	0.4498	-0.1467
5	-0.0899	-0.1943	0.1794	0.2765	0.2890	0.1579	0.3375	-0.1333	0.2258	-0.0947
6	0.0035	0.2450	0.7597	0.5003	0.7070	0.6032	0.0883	0.6905	0.5006	0.4969
7	-0.1763	-0.1782	0.6389	0.8946	0.7648	0.7760	0.8850	0.1689	0.4238	0.0401
8	-0.2039	-0.0679	0.1758	0.1615	0.2403	0.0670	-0.0321	0.1908	0.4245	0.1003
9	-0.0894	0.1787	0.3337	0.1076	0.2327	0.2987	-0.1703	0.3039	0.2836	0.4509
10	-0.2011	0.1234	0.5551	0.4186	0.5108	0.5946	0.5403	0.1651	0.4880	0.2219
11	0.0985	0.3233	0.7594	0.5571	0.6141	0.6257	0.0567	0.6685	0.6463	0.5015
12	-0.3366	-0.2464	0.1285	0.2651	0.0214	0.0966	0.3006	0.3923	0.3096	-0.1027
13	-0.2697	-0.3514	0.2879	0.5144	0.4317	0.2785	0.5239	0.0566	0.4377	-0.1525
14	-0.0993	0.1940	0.7265	0.6969	0.7175	0.7680	0.3993	0.2731	0.7397	0.4131
15	0.0587	0.3575	0.7454	0.6106	0.7255	0.6576	0.0819	0.6406	0.5924	0.3962
16	-0.1409	-0.2515	0.7455	0.5085	0.5925	0.5372	0.3535	0.6622	0.4425	0.5452
17	0.0000	-0.0000	0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000
18	-0.0087	0.2639	0.7491	0.5101	0.7005	0.6110	0.1016	0.7015	0.4730	0.5022
19	-0.0738	0.1070	0.1266	0.3153	-0.0192	0.2615	-0.0327	0.0898	0.4452	-0.1126
20	-0.2217	0.0580	-0.1644	-0.1043	-0.1357	-0.1040	-0.2132	0.0604	0.1413	-0.0211
21	-0.2799	-0.2502	0.2178	0.1162	0.1630	0.0865	0.1032	0.4431	0.2677	0.3602
22	-0.1594	-0.1395	0.3698	0.3955	0.2879	0.4125	0.3285	-0.0004	0.5697	-0.1935
23	0.0211	0.0646	0.1326	0.2571	0.2340	0.1383	0.0818	0.0535	0.3131	0.0710
24	-0.1403	0.1544	0.8209	0.8445	0.8227	0.8553	0.3858	0.4602	0.7839	0.2775
25	0.1278	0.1282	0.7901	0.7081	0.8282	0.7687	0.7649	0.3446	0.3069	0.4222
26	0.1285	0.1285	0.7895	0.7078	0.8277	0.7682	0.7648	0.3441	0.3063	0.4225
27	-0.1397	0.0581	0.8897	0.6898	0.8406	0.7190	0.3404	0.7274	0.6696	0.4264
28	0.0093	-0.3416	-0.3939	-0.0884	-0.2216	-0.2963	0.1647	-0.5592	-0.2325	-0.3909
29	-0.2356	0.1010	0.9050	0.7596	0.8598	0.8502	0.5584	0.5720	0.7640	0.4546
30	-0.1347	-0.1004	0.8052	0.8311	0.7986	0.7494	0.4619	0.5587	0.6559	0.4439
31	-0.0127	0.1486	0.3647	0.2590	0.3053	0.2651	-0.0100	0.1258	0.6388	0.1047
32	0.0000	-0.0000	0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000
33	0.0578	0.3649	0.3422	0.6411	0.5130	0.4822	0.1200	0.1985	0.5223	-0.0304
34	0.0000	-0.0000	0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000
35	-0.2185	-0.0045	0.5609	0.4024	0.3079	0.4597	0.0147	0.3366	0.7878	0.2953
36	-0.0152	0.1573	0.8273	0.7970	0.8803	0.8086	0.5113	0.4327	0.6961	0.3630
37	-0.2339	0.0087	0.5233	0.4350	0.5127	0.4385	0.2753	0.2329	0.4484	0.4001
38	0.0000	-0.0000	0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000
39	-0.1579	-0.3251	0.0056	0.3750	0.2767	0.0191	0.3010	-0.0750	0.0928	-0.1597
40	-0.0920	0.0807	0.1076	0.3012	-0.0409	0.2466	-0.0509	0.0667	0.4087	-0.1261
41	-0.3822	0.0219	-0.1013	0.0077	-0.1181	-0.0490	-0.1737	0.4639	0.1025	-0.1353
42	-0.1278	0.0697	0.3962	0.4111	0.2491	0.4221	-0.0706	0.3026	0.4253	0.1054
43	-0.2856	-0.3392	0.2630	0.3347	0.2736	0.1739	0.2788	-0.0077	0.3853	0.0226
44	-0.3240	-0.3906	0.3942	0.6249	0.4632	0.4546	0.7338	0.1042	0.3707	-0.0789
45	-0.1938	0.3122	0.6497	0.5438	0.6486	0.6666	0.1522	0.4967	0.6929	0.3750
46	0.4008	0.4793	0.6485	0.5223	0.6789	0.5854	0.1597	0.4670	0.4038	0.4168
47	0.0489	0.1503	0.6928	0.2657	0.5238	0.4553	-0.0020	0.6756	0.3815	0.9067
48	-0.2565	-0.0331	0.8023	0.8140	0.8733	0.8501	0.8093	0.3261	0.5411	0.2399
49	-0.1289	-0.1652	0.2796	0.2615	0.2677	0.1961	0.3848	0.3406	0.2050	0.0071
50	-0.1266	0.1489	0.7693	0.6412	0.6319	0.6497	0.0893	0.7696	0.7128	0.4136
51	-0.5693	-0.1315	0.0626	0.0653	0.0003	0.0630	-0.2308	0.1397	0.2445	-0.1948
52	-0.0693	0.2314	0.9060	0.8150	0.8649	0.8823	0.3978	0.5188	0.8050	0.4573
53	-0.2875	0.0049	0.7256	0.8187	0.7877	0.7714	0.4912	0.4248	0.7726	0.2127
54	-0.0973	0.0914	0.9229	0.7376	0.8401	0.8089	0.4498	0.5263	0.8190	0.4816
55	-0.2217	0.1140	0.9042	0.6951	0.8021	0.8561	0.5495	0.4426	0.6612	0.5268
56	-0.1127	-0.0613	0.8752	0.7084	0.8652	0.7420	0.6616	0.5435	0.5375	0.5287
57	-0.0926	0.1273	0.7011	0.5657	0.6675	0.5835	0.0918	0.5077	0.7109	0.3542
58	-0.2416	-0.2057	0.4824	0.6988	0.5321	0.4189	0.2795	0.4386	0.5064	0.1660
59	-0.1900	-0.4191	0.3261	0.5908	0.5001	0.3776	0.8501	-0.0201	0.1172	-0.0815
60	-0.1358	-0.0370	0.7962	0.6435	0.7658	0.7216	0.6269	0.5695	0.4293	0.2371
61	-0.1744	-0.0353	0.4184	0.5340	0.5347	0.5099	0.6934	0.0343	0.2944	-0.1061
62	-0.0187	0.1573	0.8720	0.8035	0.8320	0.8509	0.5308	0.4394	0.7459	0.3579
63	-0.2733	-0.0002	0.5983	0.6229	0.6317	0.5370	0.2257	0.5018	0.6857	0.3322
64	-0.2485	-0.1028	0.2989	0.3129	0.2962	0.2792	0.0221	0.5209	0.1254	0.3110
65	-0.1139	0.1186	0.9369	0.7509	0.8491	0.8747	0.4957	0.4491	0.7790	0.4881
66	-0.0888	0.0805	0.4335	0.6184	0.5381	0.4311	0.2646	0.3536	0.6262	0.0747
67	-0.4580	0.0668	0.5052	0.4904	0.4267	0.5738	0.1235	0.3679	0.6978	0.1338
68	-0.0127	0.0838	0.8329	0.8188	0.8736	0.7542	0.5557	0.4285	0.6991	0.4740
69	0.0426	0.0996	0.8588	0.5815	0.8008	0.6569	0.3880	0.5006	0.5659	0.7008
70	-0.0344	-0.0247	0.0864	0.2005	-0.0662	0.1502	-0.1111	-0.0389	0.4610	-0.1800
71	1.0000	0.5760	-0.1029	-0.1472	-0.0995	-0.2120	-0.1574	-0.1633	-0.2163	0.0280
72	0.5760	1.0000	0.0340	0.0189	0.0515	0.1798	-0.2471	-0.0210	0.1452	0.0293
73	-0.1029	0.0340	1.0000	0.7864	0.8931	0.8583	0.5524	0.5910	0.7200	0.5379
74	-0.1472	0.0189	0.7864	1.0000	0.8950	0.8861	0.7448	0.3482	0.6178	0.0924
75	-0.0995	0.0515	0.8931	0.8950	1.0000	0.8880	0.6975	0.4055	0.5572	0.3292
76	-0.2120	0.1798	0.8583	0.8861	0.8880	1.0000	0.6753	0.3533	0.6446	0.2930
77	-0.1574	-0.2471	0.5524	0.7448	0.6975	0.6753	1.0000	0.0200	0.1903	-0.0230
78	-0.1633	-0.0210	0.5910	0.3482	0.4055	0.3533	0.0200	1.0000	0.4637	0.5053
79	-0.2163	0.1452	0.7200	0.6178	0.5572	0.6446	0.1903	0.4637	1.0000	0.2697
80	0.0280	0.0293	0.5379	0.0924	0.3292	0.2930	-0.0230	0.5053	0.2697	1.0000
81	-0.1180	-0.1526	0.6003	0.5672	0.6690	0.3883	0.2776	0.3955	0.5456	0.4215
82	0.2438	0.4657	0.4860	0.4697	0.6023	0.4917	0.2026	0.2260	0.3832	0.4080
83	-0.1341	0.2186	0.6698	0.4880	0.6262	0.7254	0.4621	0.3346	0.4805	0.3710
84	0.0000	-0.0000	0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000
85	-0.1278	0.1082	0.2939	0.2456	0.3890	0.1966	-0.0603	0.3105	0.3111	0.1101
86	-0.0583	0.3421	0.6641	0.5382	0.5837	0.6187	-0.0406	0.5566	0.7671	0.2893
87	-0.1140	0.0765	0.4103	0.4986	0.2911	0.4027	-0.0421	0.3617	0.6799	0.0487
88	-0.1324	-0.1444	0.0263	0.2017	0.0343	-0.0201	-0.0792	0.0714	0.3850	-0.1569
89	0.0000	-0.0000	0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000

APPENDIX 4, CORRELATION MATRIX (cont'd)

	81	82	83	84	85	86	87	88	89
1	0.7195	0.6483	0.5382	0.0000	0.2181	0.3855	0.1192	-0.0009	0.0000
2	0.5411	0.6778	0.6690	-0.0000	0.2158	0.8078	0.4353	-0.0769	-0.0000
3	0.3126	0.5108	0.7450	-0.0000	0.3214	0.5809	0.4473	0.2528	0.0000
4	0.2446	-0.0827	0.0302	-0.0000	0.1438	0.0815	0.5434	0.6848	-0.0000
5	0.3914	0.0541	0.1362	-0.0000	0.5930	0.0542	0.2799	0.7518	-0.0000
6	0.4845	0.5009	0.5121	-0.0000	0.4313	0.8266	0.3464	-0.0919	-0.0000
7	0.4231	0.2878	0.3728	0.0000	-0.0703	0.2344	0.2412	0.0096	0.0000
8	0.6131	0.3623	0.2171	-0.0000	0.7556	0.2535	0.2724	0.7109	-0.0000
9	0.0827	0.3905	0.5094	0.0000	0.0048	0.4798	0.2483	-0.1035	0.0000
10	0.2361	0.3527	0.7728	-0.0000	0.2139	0.2564	0.0462	0.1344	-0.0000
11	0.4363	0.5726	0.4812	0.0000	0.1494	0.7951	0.4532	-0.1269	0.0000
12	0.1695	-0.1838	-0.0653	0.0000	-0.0543	-0.0968	0.1819	0.2899	0.0000
13	0.6195	0.1651	0.1326	0.0000	0.4115	0.1105	0.2491	0.6391	0.0000
14	0.5596	0.7558	0.7532	-0.0000	0.2252	0.5714	0.4001	0.1770	-0.0000
15	0.5087	0.5574	0.4730	0.0000	0.5019	0.8849	0.5390	0.0728	0.0000
16	0.3913	0.1558	0.3471	-0.0000	-0.0425	0.4697	0.2798	-0.1732	-0.0000
17	-0.0000	0.0000	-0.0000	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	-0.0000
18	0.4683	0.5074	0.5222	0.0000	0.4398	0.7988	0.3558	-0.0777	0.0000
19	-0.1415	-0.2295	-0.0999	0.0000	-0.0843	0.3344	0.8113	0.4092	0.0000
20	0.1204	0.3868	0.3204	0.0000	0.1941	0.0004	-0.0000	0.3426	0.0000
21	0.4341	0.4053	0.3933	-0.0000	0.1615	0.0189	-0.0716	0.2090	-0.0000
22	0.0334	-0.2623	0.1654	-0.0000	0.0538	0.4377	0.5013	0.3231	-0.0000
23	0.4385	0.4544	0.3036	0.0000	0.4774	0.1980	0.3485	0.6974	0.0000
24	0.5397	0.5192	0.5351	0.0000	0.2913	0.8148	0.6267	0.1316	-0.0000
25	0.4041	0.4704	0.5963	-0.0000	0.0479	0.3157	-0.0003	-0.2593	-0.0000
26	0.4043	0.4708	0.5954	-0.0000	0.0472	0.3149	-0.0009	-0.2596	-0.0000
27	0.6432	0.4353	0.5443	0.0000	0.5960	0.7735	0.4599	0.1616	0.0000
28	0.0197	-0.1609	-0.4553	-0.0000	-0.3843	-0.5121	-0.3290	-0.0493	-0.0000
29	0.6245	0.6401	0.8086	0.0000	0.3067	0.6169	0.2684	0.0230	0.0000
30	0.6590	0.3999	0.3664	0.0000	0.2766	0.6688	0.6328	0.2749	0.0000
31	0.4444	0.5454	0.5156	-0.0000	0.3775	0.4478	0.3177	0.4347	-0.0000
32	-0.0000	0.0000	-0.0000	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	-0.0000
33	0.5205	0.6197	0.2423	-0.0000	0.5015	0.5598	0.6202	0.4937	-0.0000
34	-0.0000	0.0000	-0.0000	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	-0.0000
35	0.3227	0.1425	0.2230	0.0000	-0.0243	0.6176	0.5838	0.1825	0.0000
36	0.6406	0.6922	0.7387	-0.0000	0.3862	0.7117	0.4291	0.2291	-0.0000
37	0.6334	0.3516	0.2046	-0.0000	0.5948	0.1733	0.2516	0.2537	-0.0000
38	-0.0000	0.0000	-0.0000	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	-0.0000
39	0.6790	0.2295	-0.2370	0.0000	0.4086	-0.0738	0.1472	0.5660	0.0000
40	-0.1658	-0.2499	-0.1220	0.0000	-0.1030	0.3200	0.8094	0.4035	0.0000
41	0.0010	0.1314	0.1018	0.0000	0.0030	0.0406	0.0029	0.0023	0.0000
42	0.0419	-0.0096	0.0798	-0.0000	0.0668	0.6121	0.7487	0.2146	-0.0000
43	0.5472	0.1140	0.0976	0.0000	0.4653	0.0856	0.3700	0.7677	0.0000
44	0.3914	0.0942	0.1719	-0.0000	-0.0430	-0.0904	0.0925	0.0893	-0.0000
45	0.5006	0.7639	0.7958	-0.0000	0.3799	0.7257	0.3418	0.1031	-0.0000
46	0.3925	0.6634	0.4879	0.0000	0.1818	0.7374	0.2381	-0.1985	0.0000
47	0.4660	0.4667	0.4604	-0.0000	0.2682	0.5821	0.1995	-0.1593	-0.0000
48	0.5227	0.4422	0.6541	0.0000	0.3299	0.3191	0.1565	0.0127	0.0000
49	0.1890	0.0586	0.1665	-0.0000	-0.2367	0.0239	-0.1731	-0.2491	-0.0000
50	0.4779	0.3649	0.3737	0.0000	0.3044	0.8631	0.6778	0.1137	0.0000
51	0.0845	-0.1061	-0.0218	0.0000	0.2283	0.3088	0.3135	0.1806	0.0000
52	0.5963	0.6556	0.6899	-0.0000	0.3161	0.8202	0.5519	0.1164	-0.0000
53	0.6681	0.6180	0.6634	-0.0000	0.4759	0.6202	0.5345	0.4252	-0.0000
54	0.6381	0.4559	0.5957	0.0000	0.4362	0.7376	0.5116	0.2307	0.0000
55	0.4743	0.4900	0.7420	0.0000	0.2730	0.4972	0.2933	-0.0665	0.0000
56	0.6631	0.6166	0.7146	-0.0000	0.2345	0.3899	0.0476	-0.1380	-0.0000
57	0.6153	0.5096	0.3546	0.0000	0.2691	0.8141	0.4135	-0.0191	0.0000
58	0.7537	0.3453	-0.0202	0.0000	0.3296	0.3993	0.5785	0.4606	0.0000
59	0.4397	0.1849	0.1494	-0.0000	-0.1042	-0.2501	-0.1690	-0.0060	-0.0000
60	0.2965	0.2413	0.7008	-0.0000	0.3358	0.4839	0.2120	0.0103	-0.0000
61	0.2939	0.0906	0.3462	0.0000	0.2919	0.1515	0.0899	0.2934	0.0000
62	0.5049	0.6019	0.6978	0.0000	0.1558	0.6264	0.3933	-0.0348	0.0000
63	0.7775	0.5545	0.4290	0.0000	0.6005	0.6432	0.5563	0.6003	0.0000
64	0.3005	0.3111	0.0889	-0.0000	-0.0115	0.2466	0.0716	-0.2470	-0.0000
65	0.5268	0.5688	0.7584	-0.0000	0.2010	0.6876	0.3966	-0.0304	-0.0000
66	0.6997	0.5288	0.3274	0.0000	0.5846	0.5120	0.5559	0.7150	0.0000
67	0.3008	0.3930	0.6209	0.0000	0.3798	0.5497	0.5522	0.3694	0.0000
68	0.8358	0.7067	0.5525	-0.0000	0.3913	0.5726	0.3909	0.2785	-0.0000
69	0.7403	0.7099	0.5938	-0.0000	0.2985	0.5111	0.1015	-0.1524	-0.0000
70	-0.1237	-0.3007	-0.1976	-0.0000	-0.1668	0.3531	0.6900	0.3239	-0.0000
71	-0.1180	0.2438	-0.1341	0.0000	-0.1278	-0.0583	-0.1140	-0.1324	0.0000
72	-0.1526	0.4657	0.2186	-0.0000	0.1082	0.3421	0.0765	-0.1444	-0.0000
73	0.6003	0.4860	0.6698	0.0000	0.2939	0.6641	0.4103	0.0263	0.0000
74	0.5672	0.4697	0.4880	-0.0000	0.2456	0.5382	0.4986	0.2017	-0.0000
75	0.6690	0.6023	0.6262	0.0000	0.3890	0.5837	0.2911	0.0343	0.0000
76	0.3883	0.4917	0.7254	-0.0000	0.1966	0.6187	0.4027	-0.0201	-0.0000
77	0.2776	0.2026	0.4621	-0.0000	-0.0603	-0.0406	-0.0421	-0.0792	-0.0000
78	0.3955	0.2260	0.3346	0.0000	0.3105	0.5566	0.3617	0.0714	0.0000
79	0.5456	0.3832	0.4805	0.0000	0.3111	0.7671	0.6799	0.3850	0.0000
80	0.4215	0.4080	0.3710	0.0000	0.1101	0.2893	0.0487	-0.1569	0.0000
81	1.0000	0.5897	0.1816	-0.0000	0.5448	0.4203	0.2798	0.3712	-0.0000
82	0.5897	1.0000	0.6035	0.0000	0.2286	0.4069	-0.0006	-0.0899	0.0000
83	0.1816	0.6035	1.0000	-0.0000	0.0793	0.4234	0.0356	-0.1976	0.0000
84	-0.0000	0.0000	-0.0000	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	-0.0000
85	0.5448	0.2286	0.0793	-0.0000	1.0000	0.4205	0.3895	0.5973	-0.0000
86	0.4203	0.4069	0.4234	-0.0000	0.4205	1.0000	0.6905	0.2402	-0.0000
87	0.2798	-0.0006	0.0356	0.0000	0.3895	0.6905	1.0000	0.6900	-0.0000
88	0.3712	-0.0899	-0.1976	-0.0000	0.5973	0.2402	0.6900	1.0000	-0.0000
89	-0.0000	0.0000	-0.0000	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	-0.0000

THE TRACE IS   82.999997

APPENDIX 4, CORRELATION MATRIX (cont'd.)

Tourist-Resorts as Traffic Generators

EIGENVALUES

1	34.641240
2	10.343028
3	8.335858
4	6.730611
5	4.371850
6	3.770842
7	3.413300
8	2.439000
9	2.087966
10	1.927574
11	1.501136
12	1.434982
13	1.055696
14	0.546305
15	0.400572
16	-0.000001
17	0.000000
18	-0.000000
19	0.000000
20	-0.000000
SUM OF EIGENVALUES	**82.999950**

APPENDIX 5, PRINCIPAL AXIS FACTORS

	1	2	3	4	5	6	7	8	9	10
1	−0.8070	0.1872	−0.4040	−0.0451	−0.0838	0.0798	−0.2969	−0.0232	−0.1201	−0.1700
2	−0.8899	−0.3489	0.0769	0.0144	−0.0583	−0.0326	−0.0234	0.1372	−0.0511	0.0396
3	−0.7140	−0.0193	0.2481	0.2422	0.1016	−0.3793	−0.1671	−0.2279	0.1933	0.0864
4	−0.2822	0.7052	0.2477	−0.3802	0.0928	−0.1344	0.1739	0.0797	−0.0600	0.2531
5	−0.2664	0.7682	0.0690	0.2126	0.4545	0.1357	0.1471	−0.1268	−0.0125	0.0255
6	−0.7481	−0.5110	0.0716	0.1816	0.0556	0.2444	0.2056	0.0565	0.0226	−0.1672
7	−0.6515	0.2393	−0.4505	−0.4840	−0.0352	−0.0152	−0.1532	0.1721	0.0457	0.0366
8	−0.3877	0.6147	0.3359	0.5129	−0.0249	0.1099	0.0380	−0.1910	−0.0069	−0.1243
9	−0.3914	−0.4352	0.3113	0.2591	−0.0452	−0.2946	−0.1180	−0.0428	0.1289	0.1918
10	−0.5563	0.3179	−0.2244	0.2832	0.3448	−0.4660	0.2665	0.0275	0.0098	0.0338
11	−0.7582	−0.5287	0.1866	−0.0706	−0.1645	0.0485	−0.0739	0.0096	−0.0253	−0.0395
12	−0.1434	0.4656	−0.0758	−0.3416	−0.4046	−0.1604	0.3577	0.1037	0.3756	0.1205
13	−0.4331	0.8412	−0.1033	−0.0209	0.0218	0.1259	0.0177	0.1071	0.1164	−0.2060
14	−0.8560	0.1057	0.1020	0.1048	−0.0190	−0.2818	−0.3361	−0.0484	−0.1470	0.1132
15	−0.7980	−0.4221	0.2307	0.0862	0.0873	0.2675	0.0425	0.1584	0.0219	−0.1015
16	−0.6363	−0.3603	−0.2276	−0.2968	−0.2464	0.0141	0.1277	−0.3191	0.2587	0.0584
17	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000
18	−0.7413	−0.4972	0.0830	0.2010	0.0592	0.2428	0.2460	0.1410	0.0281	−0.0765
19	−0.1758	0.0006	0.5398	−0.6907	0.1421	−0.1377	−0.0988	0.0810	0.1466	0.3003
20	−0.0738	0.4191	0.4272	0.5732	−0.2985	−0.3965	−0.1142	0.1122	0.0112	0.0003
21	−0.3428	0.3777	0.0243	0.4329	−0.5498	−0.2704	0.0535	−0.2218	0.1402	0.0635
22	−0.3382	0.1944	0.0600	−0.5307	0.4875	−0.1630	0.1005	−0.2935	0.0666	−0.4035
23	−0.3699	0.5867	0.3459	0.4442	0.1270	−0.0268	−0.2233	0.0057	0.2284	0.1958
24	−0.9025	−0.1558	0.1321	−0.2688	0.0043	0.0189	−0.1834	0.0479	−0.0680	−0.1183
25	−0.6857	−0.1380	−0.6140	−0.0238	0.2224	0.0637	0.0832	0.1352	0.0691	0.1626
26	−0.6852	−0.1379	−0.6145	−0.0239	0.2219	0.0643	0.0823	0.1352	0.0693	0.1635
27	−0.8870	−0.1564	0.0005	0.0612	0.0407	0.2007	0.2790	−0.0463	0.0209	−0.1708
28	0.3482	0.4252	−0.3230	−0.3392	−0.2846	0.0590	−0.5259	−0.2112	−0.0898	−0.2149
29	−0.9397	0.0204	−0.1781	0.1076	−0.0618	−0.2002	0.0969	0.0090	−0.0213	−0.0533
30	−0.8616	−0.0100	0.0229	−0.2960	−0.0662	0.2153	−0.0673	−0.1002	0.1707	0.1428
31	−0.5174	0.3154	0.3932	0.3692	0.0526	−0.2745	−0.2162	−0.2126	−0.1451	−0.2403
32	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000
33	−0.6078	0.2065	0.4276	0.0285	−0.0091	0.2122	−0.4337	0.3709	0.0283	0.0437
34	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000
35	−0.5416	−0.1043	0.3567	−0.4307	−0.1413	−0.1992	0.0126	−0.3370	−0.1832	−0.1018
36	−0.9330	0.0737	−0.0348	0.1505	0.1891	−0.0160	−0.1318	0.0218	0.1266	−0.0525
37	−0.5376	0.2186	−0.0325	0.0484	−0.1390	0.1987	0.0847	−0.0908	−0.4442	0.3104
38	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000
39	−0.1991	0.7282	−0.0404	0.0418	−0.1870	0.5513	−0.1506	0.1227	0.0026	0.0055
40	−0.1470	−0.0080	0.5702	−0.7044	0.1275	−0.1337	−0.0733	0.1022	0.0773	0.3035
41	−0.0502	0.0547	0.2593	0.1297	−0.7253	−0.3041	0.1445	0.4001	0.2669	−0.0989
42	−0.3787	−0.3068	0.5598	−0.4825	0.0620	0.0437	0.1253	0.1328	−0.2041	0.0917
43	−0.3462	0.7870	0.2131	0.0823	0.0748	0.0665	0.1887	−0.1682	−0.1636	0.1136
44	−0.4144	0.4750	−0.4164	−0.4651	−0.3244	−0.1169	−0.1248	−0.0376	−0.0676	−0.0182
45	−0.8185	−0.0893	0.2316	0.3652	−0.0885	−0.2540	−0.1102	0.1300	0.0113	−0.1010
46	−0.6778	−0.5180	−0.0733	0.1430	0.1694	0.2235	−0.2699	0.0691	0.2053	−0.1375
47	−0.6249	−0.5322	−0.0210	0.2725	−0.0437	0.1791	0.1902	−0.2861	0.0351	0.2743
48	−0.7991	0.2040	−0.4274	−0.0824	0.0242	−0.1219	0.0606	0.0837	−0.1562	0.0026
49	−0.2481	0.0158	−0.4780	−0.1756	−0.3758	−0.1907	0.0074	−0.0580	0.5149	−0.2132
50	−0.7903	−0.3896	0.3023	−0.2195	−0.1394	0.1509	0.1523	0.0588	0.0850	−0.0273
51	−0.0887	−0.0173	0.5080	−0.0830	−0.1950	−0.0086	0.4796	0.3180	−0.4287	−0.2472
52	−0.9689	−0.1579	0.0858	−0.0571	0.0559	−0.0507	−0.1256	0.0024	−0.0332	0.0041
53	−0.9023	0.3263	0.1359	0.0709	−0.0204	−0.1045	−0.0731	0.1290	0.0219	−0.0152
54	−0.9280	−0.0039	−0.0423	−0.0776	0.1516	−0.0029	0.0444	−0.2625	0.0376	−0.0517
55	−0.8433	−0.1216	−0.1896	−0.0234	0.0667	−0.2016	0.1618	0.0021	−0.2483	0.2149
56	−0.8459	−0.0189	−0.4522	0.1342	−0.1247	−0.0223	0.0676	−0.0732	−0.0476	0.0246
57	−0.7625	−0.3198	0.1168	−0.1113	−0.2003	0.1537	0.1847	−0.1822	−0.0318	−0.3650
58	−0.6037	0.2840	0.2108	−0.2901	−0.4142	−.4244	−0.0140	0.1531	−0.0354	0.1554
59	−0.3284	0.5370	−0.6601	−0.2700	−0.2583	0.0288	−0.1282	0.0652	−0.0072	0.0143
60	−0.7182	−0.0438	−0.3006	0.0524	0.2580	−0.1066	0.4273	0.0919	0.1446	−0.1338
61	−0.4154	0.5222	−0.3678	−0.0119	0.4188	−0.0239	0.3281	0.1898	0.1177	−0.0988
62	−0.8987	−0.1299	−0.1195	−0.1602	−0.0219	−0.1813	−0.2515	−0.0620	−0.0410	−0.0487
63	−0.7856	0.3620	0.3016	0.2308	−0.0609	0.1574	0.1127	0.0378	0.1060	0.0335
64	−0.3334	−0.3071	0.0397	−0.1275	−0.7372	0.1147	−0.0230	0.1316	−0.1673	0.0004
65	−0.9261	−0.1717	−0.1007	−0.0821	0.0741	−0.1993	−0.0819	−0.1471	−0.1055	−0.0123
66	−0.6752	0.5438	0.2903	0.1903	0.0273	0.1684	−0.0918	0.1229	0.2522	−0.0110
67	−0.6527	0.1704	0.4883	0.0620	−0.1384	−0.4370	0.0585	0.1107	−0.2124	−0.0159
68	−0.9172	0.2044	−0.1322	0.0780	0.0269	0.1698	−0.1179	−0.0410	0.0424	0.1288
69	−0.8281	−0.2147	−0.2884	0.1987	−0.1165	0.1351	−0.0837	−0.2409	−0.1642	0.0590
70	−0.1080	−0.0262	0.4792	−0.7561	0.0996	−0.1374	−0.2571	−0.2700	0.0474	−0.0901
71	0.1525	−0.2803	−0.1043	0.1663	0.3874	0.2628	−0.5150	−0.0320	0.2886	0.1488
72	−0.1105	−0.3782	0.1946	0.2615	0.3552	−0.0672	−0.3689	0.3708	0.0923	0.0496
73	−0.9344	−0.1471	−0.1674	−0.0956	0.0704	−0.0164	0.1567	−0.1118	−0.0601	0.0575
74	−0.8524	0.1767	−0.1491	−0.3292	0.0410	0.0809	−0.0864	0.2925	−0.0125	0.0111
75	−0.9113	0.0092	−0.2956	−0.0220	0.0922	0.1460	−0.0146	0.1302	−0.1007	−0.0559
76	−0.8736	−0.0670	−0.1690	−0.2081	0.1673	−0.1785	0.0056	0.2195	−0.1326	0.0496
77	−0.4957	0.3431	−0.6694	−0.2707	0.1283	−0.1215	0.0194	0.2045	−0.0437	0.0719
78	−0.5883	−0.2842	0.1258	0.0708	−0.3752	0.0804	0.4274	−0.0452	0.4032	0.0400
79	−0.8054	0.0977	0.3195	−0.1893	0.0228	−0.1754	0.0011	−0.1871	0.0159	−0.1337
80	−0.4555	−0.3732	−0.0835	0.2931	−0.1497	0.0654	0.1156	−0.4645	−0.0443	0.5057
81	−0.7047	0.2950	−0.0332	0.1751	−0.2633	0.4783	−0.0582	−0.1889	−0.0915	−0.0107
82	−0.6420	−0.0729	−0.0622	0.4981	−0.1236	0.0277	−0.4734	0.1943	−0.0908	0.0745
83	−0.6919	−0.1200	−0.1728	0.3273	0.1405	−0.5588	0.0131	0.1029	−0.0501	0.0080
84	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000
85	−0.4143	0.2666	0.3169	0.3694	0.1530	0.4447	0.2535	0.0110	−0.1175	−0.1143
86	−0.7540	−0.3091	0.4338	−0.0469	0.1620	0.0900	0.0382	0.0014	0.1069	−0.2638
87	−0.5094	0.0886	0.6782	−0.4260	0.1883	0.1321	0.0577	−0.0180	0.1312	0.1063
88	−0.1967	0.6750	0.5910	−0.0523	0.1758	0.2473	0.0958	−0.1180	0.1572	0.0716
89	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000	−0.0000

APPENDIX 6, FACTOR SCORES IN RANK ORDER

	Factor I	Factor II	Factor III	Factor IV	Factor V	Factor VI
1	74(18)	53(10)	56(13)	76(23)	69(33)	69(14)
2	57(13)	52(11)	55(10)	55(10)	60(34)	69(18)
3	57(14)	52(12)	54(14)	53(14)	56(13)	69(34)
4	55(23)	52(17)	54(33)	51(18)	55(15)	57(15)
5	54(34)	52(25)	52(20)	51(22)	55(18)	45(10)
6	53(15)	52(35)	52(34)	51(35)	55(25)	45(11)
7	53(32)	51(14)	51(12)	48(11)	51(32)	45(12)
8	49(10)	51(20)	51(15)	48(12)	48(10)	45(13)
9	45(17)	51(23)	50(11)	48(13)	48(12)	45(17)
10	45(22)	50(18)	50(17)	48(17)	47(17)	45(20)
11	44(11)	50(22)	49(22)	48(20)	47(23)	45(22)
12	44(33)	49(15)	49(32)	46(15)	44(14)	45(23)
13	43(12)	49(33)	49(35)	46(32)	43(20)	45(25)
14	43(20)	49(34)	44(25)	46(33)	43(22)	45(32)
15	43(25)	48(13)	42(23)	45(25)	40(11)	45(33)
16	41(35)	41(32)	40(18)	41(34)	40(35)	45(35)

The number in parentheses refers to the Resort Area.